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Important Aviation Gains Shown by CAA 1948 Survey

Five important advances in aviation have been recorded in 1948, according to year-end figures released by D. W. Rentzel, Administrator of Civil Aeronautics. These are improvement in the airline safety record; substantial increase in domestic and international air freight business; major advances in air navigation aids; a significant increase in the amount of industrial flying, and a 14 percent increase in the number of airports.

At the same time, aircraft manufacturing and student pilot licensing showed declines, Rentzel stated.

"The progress which these figures reveal is encouraging, but it leaves much yet to be done," the Administrator said. "When we find the fatalities per 100 million passenger-miles in scheduled U. S. domestic and international air travel dropping from 2.9 in 1947 to an estimated 1.3 for 1948, we have a right to feel encouraged. Safety is, and will continue to be, the major goal of the CAA in all kinds of flying, scheduled and non-scheduled. The growth and acceptance of air travel and air transportation is our continuing task."

Safety Figures Improve.—The 1948 safety record of 1.3 fatalities per 100,000,000 passenger-miles was the best in history for domestic and international air traffic combined. Both international and domestic safety figures for 1948 also show improvement. The CAA estimates the domestic fatality rate for 1948 will be 1.3 per 100,000,000 passenger miles, as against 3.2 in 1947, and in international travel, the year's figure will be 1.0 per 100,000,000 passenger miles against 1.1 in 1947.

Through December 8, 1948, there were five airline accidents on the domestic routes in which 83 passengers and 14 crew members were killed, and one American Flag accident in international operation with 20 passengers and 10 crew members killed. This total of 103 passenger fatalities in six accidents compares with the 1947 record of 219 in eight accidents.

Ton-miles of express and freight carried by domestic and international scheduled air services increased by 47 percent in 1948. The figures jumped from 97,568,958 ton-miles to an estimated 143,000,000 ton-miles. The domestic increase was greater than the international, 52 to 37 percent. ("Ton-mile" means 1 ton of freight flown 1 mile.)

RTCA Program Demonstrated.—Steady progress in the development and installation of air navigation aids was evident throughout the year. Activ-

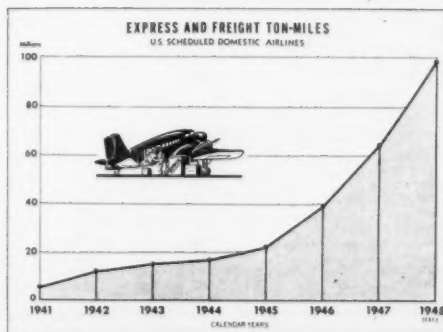
ities to give effect to the report of the special committee of the Radio Technical Commission for Aeronautics on a 15-year program of new navigation aids for civil and military use were well under way at the year end. In dramatic demonstrations at Indianapolis, the RTCA, assisted by the CAA, showed the elements of the proposed interim system to high government and industry officials directly concerned with keeping ahead of the rapidly increasing problems of handling a constantly mounting number of planes in the air.

Chief among these aids are the omnirange, the distance measuring equipment, the parallel course computer, the radio and radar landing aids. The CAA's program of replacing low frequency ranges with 409 very high frequency omniranges, much superior in their service to airline and private pilots, is nearing completion.

Of the new ranges, construction is complete on 375, and 269 are ready for immediate operation.

Instrument Landings Nearer.—Automatic in-

(Continued on page 5)



Cross-Wind Gear Promotion Plan on CAA Program

Vigorous promotion of the cross-wind landing gear to make possible single-strip airports will be a keystone of Civil Aeronautics Administration policy, Administrator D. W. Rentzel said recently in announcing that John H. Geisse will be in charge of the program.

Geisse was in charge of the CAA cross-wind landing gear development program at its outset, and more recently has been a consultant on the project. He now will devote most of his time, Mr. Rentzel said, to securing widespread use of the gear.

This will involve working with manufacturers on further refinement of the gear; with aircraft companies on installing it as original equipment; with operators of private and commercial aircraft on conversion of their planes to the cross-wind gear, and, through the CAA Office of Airports, with communities planning to build or improve airports.

Device Proved Feasible.—"It has not been our purpose to wait until all airplanes are equipped with this gear and then begin to build airports to suit," Mr. Rentzel said. "Instead we have begun to encourage communities to work out their master plans for airports on the basis of cross-wind landings, and thus to encourage and hasten the adoption of this device which the CAA has proved feasible, safe and valuable.

"Small, one-strip fields can be spotted in metropolitan areas close to a large number of potential users, while larger airports can be built so that when planes are equipped with cross-wind gear all runways can be used simultaneously, thus increasing the capacity of the airport. An excellent example of a single-strip, close-in airport is Chicago Lakefront Airport on Northerly Island."

Big Saving Possible.—"When you consider that it may cost more than a million dollars to pave a single long runway, it is apparent how much more effectively airport money can be invested if the cross-wind gear program is advanced at a rapid rate.

"Our determination to push this program is reinforced by the resolutions of the Non-Scheduled Flying Advisory Committee and of the National Aviation Clinic in favor of single-runway fields."

Office of Enforcement On Economic Policies Established by CAB

The Civil Aeronautics Board last month announced the organization of an Office of Enforcement, the Chief of which shall report directly to the Board. The Board said the primary mission of the new Office of Enforcement is to insure compliance with the Board's economic policies rather than to participate in formulating those policies.

At the same time the Board named Oliver Carter, Acting Chief of the present Enforcement and Litigation Section of the Bureau of Law, to be the Chief of the new Office of Enforcement.

The Board said the new office was required because of the increasingly important problems connected with economic enforcement, many of which have developed since the close of the war. There will be continued in the Office of Enforcement certain functions heretofore performed by the Bureau of Law and the Bureau of Economic Regulation. It is expected that establishment of the new office will also facilitate operations under the provisions of the Administrative Procedures Act.

To Advise on Policy.—The Board emphasized that the Bureau of Law would continue to be the Board's principal adviser on matters of law and legal issues such as interpretations of the Civil Aeronautics Act or the regulations, while the Bureau of Economic Regulation would continue to be responsible for interpretation of economic data and advice to the Board regarding policy and procedure to be followed in the economic regulation of air transportation.

The Bureau of Economic Regulation also will continue to take certain preliminary investigative or other actions toward obtaining voluntary compliance with the economic regulatory provisions administered by the Bureau.

To carry out the duties of the new Office of Enforcement, the Board will transfer personnel from the Bureau of Law and the Bureau of Economic Regulation who have formerly been assigned to functions and activities concerned with matters falling within the scope of that office.

Formerly Trial Attorney.—Oliver Carter, the Chief of the New Office of Enforcement, came to the Board in 1946 as a trial attorney engaged in enforcement and litigation work. He was designated Acting Chief of the Enforcement and Litigation Section of the Bureau of Law in March 1948.

Prior to his service with the Board, Mr. Carter served in the Air Transport Command as Assistant Judge Advocate of the Caribbean Division of the Air Transport Command, and later as Staff Judge Advocate General for the South Atlantic Division in Brazil.

Publication Gives Data On Industrial Flying

"Industrial Flying" is the title of a recent publication of the Civil Aeronautics Administration which describes what the airplane is doing in industrial flying. It suggests possibilities for use of the airplane to those now operating aircraft, those interested in aviation as a business or career, and all others to whom the airplane has utility.

The 22-page publication is on sale for 10 cents a copy by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Airframe Weight Off; Aircraft Shipments Declined in October

October shipments of civil aircraft totaled 502, amounting to 794,200 pounds of airframe weight. These figures are down 15 percent and 4 percent respectively from the 590 planes and 828,900 pounds airframe weight shipped during September.

Total value of complete aircraft shipments was \$8.4 million, of which 26 percent was personal-type planes and 74 percent transport type.

October shipments of civil aircraft engines fell to 221, from the 428 units shipped during September.

	Number of Units		Airframe Weight (000 lbs.)	
	Oct.	Sept.	Oct.	Sept.
Total	502	590	794.2	828.9
By Type:				
Personal	476	569	389.8	445.6
Transport	26	21	404.4	383.3
By number of places:				
2-place	156	208	88.3	117.6
3- to 5-place	320	361	301.5	328.0
Over 5-place	26	21	404.4	383.3
By total rated hp (all engines):				
1-74 hp	64	95	31.5	46.4
75-99 hp	71	90	41.1	52.1
100-399 hp	340	382	314.3	341.4
400 hp and over	27	23	407.3	389.0

The number of civil aircraft shipped during the first 10 months of 1948 was 46.5 percent of 1947 shipments for the same period. The decline in aircraft production continued throughout 1947, and 1948, with output reaching its lowest point in February. Production for 1948 followed the normal seasonal pattern, reaching its peak in June, and showing a year-end decline thereafter.

Production of transport or "over 5-place" planes remained relatively steady, with 214 being produced during the first 10 months, compared to 242 for the same period last year. The monthly figures on civil aircraft shipments, broken down into size categories, for the first 10 months of 1948 and comparable records for 1947 are given in the following tables:

January-October 1947

Months	Total all models	2-place	3- to 5-place	Over 5-place
January	2,166	969	1,177	20
February	1,914	793	1,110	11
March	1,785	789	973	23
April	2,039	965	1,042	32
May	1,646	847	771	28
June	1,193	590	574	29
July	998	475	509	14
August	929	434	472	23
September	1,028	547	451	30
October	802	390	380	32
Totals	14,500	6,799	7,459	242

January-October 1948

Months	Total all models	2-place	3- to 5-place	Over 5-place
January	462	229	220	13
February	461	221	226	14
March	578	337	227	14
April	766	461	289	16
May	812	337	441	34
June	959	482	444	33
July	920	473	430	17
August	700	242	432	26
September	590	208	361	21
October	502	156	320	26
Totals	6,750	3,146	3,390	214

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DEPARTMENT OF COMMERCE

Charles Sawyer, Secretary

Civil Aeronautics Administration
D. W. Rentzel, Administrator

Ben Stern, Asst. Administrator
for Aviation Information

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CAA and CAB Releases

Copies of CAA releases may be obtained from the CAA Office of Aviation Information. CAB releases are obtainable from the Public Information Section of the Board. Both offices are located in the Department of Commerce Building, Washington 25, D. C.

Administration

CAA-Developed Approach Light System Adopted as Standard. (December 3).

Federal Airport Program Highlights, October 15-November 15. (December 7).

CAA Announces New Aviation Statistical "Bible". (December 10).

CAA to Push Cross-Wind Gear in Connection With Airport Program. (December 31).

Five Aspects of Aviation Show Improvement in 1948 CAA Reports. (December 29).

Second Study of All U. S. Civil Aircraft Released by CAA. (December 29).

CAA Says Economic Life of Community Affects Airport Need. (December 29).

Board

CAB Authorizes Helicopter Service in Chicago Area. (CAB 48-97) (November 26, 1948).

Increased Mail Rate Proposed for Pioneer Airlines. (CAB 48-98) (November 30, 1948).

Study to Determine Size of Crews for Large Transport Aircraft. (CAA-CAB Joint Press Release) (November 30, 1948).

Mileage and Traffic Statistics for August 1948. (CAB 48-100) (December 2, 1948).

McClurkin Named Director, Bureau of Economic Regulation. (CAB 48-101) (December 2, 1948).

Board Chief Pilot Inspects Berlin Air Lift. (CAB 48-102) (December 2, 1948).

CAB Extends the Expiration Date of Monarch Airlines, Inc. (CAB 48-103) (December 6, 1948).

Proposed Revisions of Section 292.1 (CAB 48-104) (December 13, 1948).

CAB Interpretation of "Regular" Air Service. (CAB 48-105) (December 13, 1948).

Temporary Mail Rate for National Airlines System. (CAB 48-106) (December 14, 1948).

Board Announces New Office of Enforcement. (CAB 48-107) (December 16, 1948).

CAB Proposes Mail Rate for Northwest Airlines. (CAB 48-108) (December 17, 1948).

Temporary Mail Rate Proposed for Capital Airlines. (CAB 48-109) (December 22, 1948).

Aero Transportes Granted Temporary Permit. (CAB 48-110) (December 23, 1948).

CIVIL AERONAUTICS JOURNAL JANUARY

Economy Idea Brings CAA Engineer Cash Award CAB Action Takes Northwest Airlines From "Big Five" Case



Secretary of Commerce Charles Sawyer, left, is shown presenting Alfred F. Hopkins with a check for \$325 and a certificate of award, while D. W. Rentzel, Administrator of Civil Aeronautics, looks on.

A suggestion that will save the Government many thousands of dollars each year paid off recently when Albert F. Hopkins, Civil Aeronautics Administration radio engineer, was presented a \$325 check by Secretary of Commerce Charles Sawyer in a ceremony in the Secretary's office.

The award was for a new method of computing prices of intermediate quantities of items purchased by the Government. The method has been adopted and in use by the CAA purchasing office for about one year.

In making the presentation, Secretary Sawyer congratulated Mr. Hopkins and said he feels strongly on the subject of recognition of merit, expressing the hope that the award might serve as an inspiration to others. He pointed out that the award was the

largest presented by the Department of Commerce since its employee suggestion program was inaugurated in August 1947.

Mr. Hopkins is chief of the Technical Specifications Section of the CAA office of Federal Airways, where he has been employed since January 2, 1946. Prior to his service with the CAA, he was a radio engineer with the Coast Guard for 10 years, including 2 years as a commissioned officer. He went on inactive duty in November 1945 with the rank of Lieutenant Commander.

Mr. Hopkins was graduated from the University of Minnesota with an Electrical Engineering Degree in 1931, and in 1933 received his Master of Arts Degree from the same university.

CAB Grants Pioneer Airlines Mail Pay Rate Increase

The Civil Aeronautics Board last month increased the rate of pay on the carriage of mail received by Pioneer Airlines for the period after May 1, 1948.

The new rate approved by the Board is a sliding-scale mail rate on a passenger load factor basis. The maximum rate is 48 cents per airplane-mile at a passenger load factor of 31 percent or lower. On the basis of an estimated annual passenger load factor of 34 percent, the estimated annual mail pay will amount to about \$1,760,000, or 46.05 per airplane-mile.

The new rate will be computed on the basis of a daily estimated mileage of 12,628 miles, as compared with a daily mileage of 8,150 used in computing the rate for the previous period. This increase in mileage reflects the operation of new routes awarded to Pioneer in the Arizona-New Mexico case.

The mail rate formerly established by the Board for Pioneer provided for a maximum rate of 45 cents per airplane-mile at a passenger load factor of 35 percent. At this rate, during the 12-months period ending April 30, 1948, Pioneer received \$1,111,799 for the transportation of mail.

Pioneer is the oldest feeder airline in the United States and operates local routes in Texas and New Mexico.

CAB Proposes to Increase Capital Airlines Mail Pay

The Civil Aeronautics Board December 22, in a show cause order directed to Capital Airlines, proposed a temporary mail rate of 18 cents per airplane mile. The Board estimates that the proposed rate will provide about \$3,050,000 in mail revenue for Capital during the year 1949.

The show cause order also provides for a lump sum payment of \$8,997,000 for the 2-year period January 14, 1947 to December 31, 1948. This amount is equivalent to a rate of approximately 28.7 cents per plane mile and provides approximately \$3,150,000 in mail pay in addition to the amount Capital has received under the temporary rates effective during the period.

The Board, in taking this action, stated that its analyses indicate that Capital's financial condition will deteriorate in the absence of provision increasing its temporary rate of mail compensation for the future period, since the temporary rate effective January 1, 1949, under the existing rate orders, will, in the absence of amendment, decrease to a rate of 7.5 cents per airplane mile.

The proposed rate is subject to acceptance by Capital, and may be made effective after hearing and order of the CAB.

The Civil Aeronautics Board acted last month to remove Northwest Airlines from the so-called "Big Five" rate case, involving American Airlines, Eastern Airlines, Northwest Airlines, Transcontinental & Western Air, and United Air Lines, and place Northwest in a separate proceeding.

The Board issued a show-cause order directed to Northwest Airlines proposing a rate of 14 cents per airplane mile on and after December 8, 1947, related to a daily base mileage of 60,000 miles.

The Board estimated that under the newly proposed rate of 14 cents a plane mile, Northwest's domestic mail revenue for the calendar year 1948 will amount to approximately \$2,287,000 as compared with approximately \$1,523,000 under the presently effective temporary service rate yielding from 70 to 75 cents a ton-mile (approximately 9 cents a plane-mile) and based on a sliding scale related to daily ton-miles carried.

Separate Rate Proposed.—In proposing a separate rate for Northwest, the Board stated that the traffic data reported by this airline and other airlines involved indicated that Northwest has recently become further removed from the so-called "Big Four" in terms of total traffic carried. The Board said it is now apparent that the service rate presently effective as a temporary mail rate for Northwest is not adequate to compensate for the inherent differences between this carrier and the Big Four and that the present temporary rate cannot be considered an adequate mail rate for Northwest's present scale of operations.

The Board found it appropriate, therefore, "to eliminate Northwest from the class of carriers which includes the Big Four." It was further stated that, "Although we (the Board) believe that in the present stage of development Northwest is unable to operate profitably at a rate which is reasonable for the Big Four carriers, it is nevertheless our opinion that Northwest should reach a stage of development in the reasonably near future which will permit its being joined with the Big Four group for purposes of establishing mail rates."

At the same time the Board issued an order consolidating the rate proceedings of the Big Four, American, Eastern, TWA, and United, into one proceeding for hearing before an examiner at a time and place hereafter to be designated.

Ceylon Airport Survey Made By CAA Airport Engineer

A CAA airport specialist, Francis J. Rhody, is now in Ceylon making a survey of Ratmalana Airport, D. W. Rentzel, Administrator of Civil Aeronautics, announced January 3.

Expenses of the survey will be borne by the Ceylonese government, which requested CAA assistance in a rehabilitation program. The survey is an early step in developing Ratmalana into an international airport.

During his 10 weeks in Ceylon, Mr. Rhody will make a complete analysis of the field, furnish engineering advice, and otherwise assist the Ceylonese government in the development project.

Mr. Rhody, who is Special Advisor to the Assistant Administrator for Airports, has had more than 15 years of airport experience with CAA in this country and abroad.

CAB Interprets Rules Affecting Irregulars

The Civil Aeronautics Board has issued an interpretation of its Economic Regulation 292.1 governing small and large irregular air carriers, in the form of illustrative examples of "irregular" air transportation as therein defined. The operation of "regular" service by a so-called irregular air carrier is in violation of the terms of Section 292.1 of the Board's Economic Regulations.

This interpretation presents detailed examples to illustrate what the Board considers both "irregular" and "regular" services. The Board said that all irregular air carriers "should study these examples, for the Board expects to use them as standards to apply to the operations of such carriers."

The Board further stated that, while these examples refer only to actual operations, an irregular air carrier is not immune from enforcement action even though its actual operations are irregular, if all the circumstances surrounding its business show that the carrier is holding out regular service by reason of the nature and extent of its advertising and traffic solicitation efforts.

The Board also cited as an example of "regular" service, in violation of the terms of the regulation, a plan whereby a number of large irregular carriers by agreement utilize the services of a single ticket agency, if the flights when considered in combination reveal a pattern of operations shown to be a "regular" service. Under these circumstances, the Board pointed out, each such carrier would be held to be conducting regular operations between the specified points.

Economic Characteristics Linked to Airport Needs

The economic character of communities is as important as their size in determining airport need, according to a study by the CAA Office of Airports, released recently.

The study, "Economic Character of Communities," the first in a series of eight dealing with the demand for airports, outlines a method of community analysis which has been tested in approximately 160 city surveys. The manner in which the people of a community earned their living—their "economic lives"—was viewed as forming the community's character.

The study was made to determine to what extent economic character should enter into airport planning as against population in arriving at aeronautical demand and necessity in airport construction.

Since its completion 2 years ago the study has been used extensively by CAA personnel in the field in formulating the National Airport Plan and the construction programs under the Federal Airport Act.

Seven other studies along similar lines are in preparation and will include "Domestic Air Cargo," "Airline Passengers," "Personal Aircraft," "Air Mail Potentials," "Airport Activities," "Airport Facilities," and "Airline Travel Distances."

Copies of the "Economic Character of Communities" may be obtained from the CAA Office of Aviation Information, Washington 25, D. C.

Revenue Passengers Increase

In the first half of 1948, all scheduled air carriers, domestic and international, transported 6,667,996 revenue passengers 3,815,886,000 passenger miles at a passenger fatality rate of 1.8 per 100 million passenger miles, the Civil Aeronautics Board reports. For the corresponding period of 1947, the figures were 6,658,610 passengers and 3,801,449,000 passenger miles with a passenger fatality rate of 4.2 per 100 million passenger miles.

Air Regulations . on January 1, 1949

TITLE	No.	PART			MANUAL		
		Price	Date	No. of Amend-ments	Price	Date	No. of Amend-ments
Aircraft							
Airworthiness Certificates.....	1	\$0.05	10/15/42	3	None	None	
Type and Production Certificates.....	2	.05	7/1/46	1	\$0.10	8/1/46	
Airplane Airworthiness—Normal, Utility, Acrobatic, and Restricted Purpose Categories.....	13	.25	12/15/46	4	None	None	
Airplane Airworthiness.....	4a	.25	11/1/47	1	.75	7/1/44	
Airplane Airworthiness Transport Categories.....	14b	Free	11/9/45	10	None	None	
Rotocraft Airworthiness.....	6	.10	5/24/46	2	None	None	
Aircraft Airworthiness, Limited Category.....	9	.05	11/21/46	2	None	None	
Engine Airworthiness.....	13	.05	8/1/41		None	None	
Propeller Airworthiness.....	14	.05	7/15/42	1	.15	5/1/46	
Equipment Airworthiness.....	15	.05	5/31/46		None	None	
Radio Equipment Airworthiness.....	16	.05	2/13/41		Free	2/13/41	
Maintenance, Repair, and Alteration of Aircraft, Engines, Propellers, Instruments.....	18	.05	9/1/42		.60	6/1/43	
Airmen							
Pilot Certificates.....	20	.05	11/10/48		None	None	
Airline Pilot Rating.....	21	.05	10/1/42	5	None	None	
Lighter-than-air Pilot Certificates.....	22	.05	10/15/42	4	None	None	
Mechanic Certificates.....	24	.05	7/1/43	3	None	None	
Parachute Technician Certificates.....	25	.05	12/15/43	5	None	None	
Traffic Control Tower Operator Certificates.....	26	.05	10/10/45	4	None	None	
Aircraft Dispatcher Certificates.....	27	.05	7/1/46	3	None	None	
Physical Standards for Airmen.....	29	.05	1/10/46		None	None	
Flight Radio Operator Certificates.....	33	.05	8/1/47	1	None	None	
Flight Navigator Certificates.....	34	.05	8/1/47	1	None	None	
Flight Engineer Certificates.....	35	.05	11/1/48		None	None	
Operation Rules							
Air Carrier Operating Certification.....	40	.10	7/10/46	2	None	None	
Scheduled Air Carrier Operations Outside Continental United States.....	41	.10	7/20/48	2	None	None	
Nonscheduled Air Carrier Certification and Operation Rules.....	42	.05	8/1/46	10	.15	11/1/46	
General Operation Rules.....	43	.05	12/1/47	4	None	None	
Foreign Air Carrier Regulations.....	44	.05	11/1/47		None	None	
Operation of Moored Balloons.....	48	.05	9/28/47		None	None	
Transportation of Explosives and other Dangerous Articles.....	49	.05	7/1/45	1	None	None	
Air Agencies							
Airman Agency Certificates.....	50	.05	4/30/46		.15	5/15/46	
Ground Instructor Rating.....	51	.05	12/15/43	3	None	None	
Repair Station Rating.....	52	.05	10/1/42		No stock	2/41	
Mechanic School Rating.....	53	.05	8/1/42	1	Free	5/40	
Parachute Loft Certificates and Ratings.....	54	.05	1/21/43		.15	7/1/48	
Air Navigation							
Air Traffic Rules.....	60	.10	10/8/47	3	\$1.00	8/1/48	
Scheduled Air Carrier Rules.....	61	.10	6/15/48	3	None	None	
Miscellaneous							
Rules of Practice Governing Suspension and Revocation Proceedings.....	97	Free	1/1/47	1	None	None	

¹ Certain aircraft may comply with the provisions of this part or part 4.

² Special regulations SR-324, SR-324-A.

³ Special regulations SR-323, SR-326, 322-A, SR 323-A.

⁴ Special regulations 397, 397-A, 328, 329.

⁵ SR-325, 329.

⁶ Special regulations 397, 397-A, SR-323, SR-325, 329, 323-A.

⁷ Combined with Flight Information Manual, Vol. 3, No. 1.

NOTE: Those parts and manuals for which there is a price are obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Remittances should be by check or money order, payable to the Superintendent. Currency is sent at sender's risk. Amendments, Special Regulations and free Parts are obtained from the Publications Section, Civil Aeronautics Board, Washington 25, D. C.; free Manuals from the CAA Office of Aviation Information, Dept. of Commerce, Washington 25, D. C.

Monarch Granted One-Year Extension of Certificate

The Civil Aeronautics Board has extended the expiration date of the temporary certificate of Monarch Airlines from March 31, 1949 to March 31, 1950.

The Board said that the facts in this proceeding indicate a continued improvement in the operating results of Monarch and the likelihood of further improvement in the future. Monarch's temporary 3-year certificate was issued in March 1946, but its operations did not reach a system-wide basis until August 15, 1947.

The Board said the extension will give Monarch an opportunity to operate for a period more nearly approximating 3 years and such operations would provide data to permit an adequate appraisal by the Board of the potentialities of the feeder service specified by its certificate.

Monarch is a feeder airline based at Denver, Colorado, and operates between Albuquerque, N. Mex., and Denver.

Temporary Mail Rate Set For National Airlines by CAB

The Civil Aeronautics Board last month established a temporary mail rate for National Airlines, over its entire system.

The temporary rate provides that for the period from July 14, 1947 to June 30, 1948, National be paid a lump sum of \$1,022,000 which will provide National with approximately \$233,000 cash over and above the mail pay already received during this period.

The Board at the same time established a temporary mail rate to be effective on and after July 1, 1948, of 17 cents a plane-mile, computed on a daily designated mileage of 28,000 miles.

It is estimated that under the new temporary rate, National's annual mail revenue will be approximately \$1,440,000. National's previously effective mail rate was 10.5 cents a plane-mile for 1948, with a 7.5 cent rate scheduled to go into effect after January 1, 1949.

Important Gains Made in Civil Aviation

Revealed by CAA Figures for Past Year

(Continued from page 1)

strument landing came several steps closer to actual adoption, and the airlines were operating on lower weather minimums at 79 stops through their use of the CAA-developed Instrument Landing System. A new and better system of approach lights, the CAA-developed slope line system, was adopted as standard and will be installed before the end of this fiscal year at several major airports.

Regularity of operation of airlines was increased during the year by the granting of new and lower minimums for scheduled landings through use of the ILS. All major airlines and three feeder lines have been authorized to operate down to minimums of 300-foot ceilings and visibility of three-quarters of a mile. Five airlines have had a second reduction of minimums following a satisfactory operation record under the first reduction. Use of ILS has become routine at 79 terminals; and at 5 of these airline stops, the additional landing aid of precision beam radar is in operation.

Industrial flying, a newcomer to the scene over the last few years, showed a healthy advance, although the growth has not yet crystallized so that adequate and detailed statistics are available. The airplane is proving its great importance as a tool in agriculture, conservation and public health, and by the end of 1949, as reporting systems are established, more dependable figures should be available. A booklet on this general subject, "Industrial Flying," was issued during the year by the Office of Aviation Information of the CAA.

Planes Fight Insects.—In 1948 more than 100 towns, communities, and resort areas contracted with airmen for spraying from the air with DDT to control flies and other insects.

An estimated 10,000,000 pounds of the new weed-killing 2,4-D chemical was used in 1948, and of that approximately one-half was applied from airplanes. This is a very fast-growing aerial enterprise. Millions of acres were treated for weed control from the air, using both the dust and liquid forms of 2,4-D.

Legal difficulties have arisen in the use of dust which floats to nearby crops and injures them. Several state legislatures meeting in January 1949, will have restrictive laws up for consideration. There is a need, experts believe, for safe and sane regulation of this business in order to protect it from careless operators, and to guide it along a course where it will serve agriculture most efficiently. The CAA and the U. S. Department of Agriculture are cooperating on such rules.

Civil Airports Increase.—Investment of private and Government funds in airport development in 1948 was an important factor in increasing the nation's civil airports by 16 percent from 5,258 on January 1 to an estimated 6,100.

From the Government standpoint, much was accomplished during 1948 under the CAA sponsored Federal Aid Airport program. In this connection, the Administrator pointed out, a total of 462 grant offers involving \$48,702,276 in Federal funds was made for airport construction or development. Of the 462 grants 87 were for Class I airports, 123 were for Class II airports, 114 were for Class III airports and 138 were for Class IV or larger fields. Included in the grants were 149 projects totaling \$9,769,946 for construction of new airports.

Since the beginning of the program in 1946, 594 grant offers have been made for a total outlay of \$62,092,244 in Federal funds. Of this number, 132 grants for \$13,702,276 in Federal funds were made prior to January 1, 1948. Federal funds usually are

matched dollar for dollar by local sponsors, with a greater proportion of local funds in some cases.

CAA records show 132 projects as having been completed as of November 1, with an estimated 18 additional in stages of construction that assure completion by year-end. In the nation-wide airport picture the civil airports totaled 6,009 as of December 1. Broken down by Class they included 4,007 Class I or smaller, 967 Class II, 467 Class III, 361 Class IV, 132 Class V, and 75 Class VI or larger. By types there were 3,000 commercial fields, 2,044 municipal fields, 162 CAA intermediate fields and 803 fields of all other type except military.

Number of Pilots Increase.—While the total number of pilots increased from 433,241 in 1947 to an estimated 500,000 in 1948, the rate of issuance of pilot certificates was slower. Issuance of 115,000 student pilot certificates was down 40 percent, largely due to the curtailment in GI flight training; private licenses totaling 85,000 were less by 29 percent; and 11 percent fewer airline pilot ratings (1,100 were issued). Only commercial pilot licenses were on the increase, with 7,200 issued in 1948 as against 6,668 the year before.

The number of civil aircraft manufactured dropped from 15,617 in 1947 to 7,500 in 1948. Production of two-place planes dropped 54 percent; of 3-, 4- and 5-place planes, 52 percent. It is significant, however, that production of four-passenger planes of the type used for executive travel and in some instances for agricultural purposes comprised a larger proportion of the total than in previous years.

A new and revised edition of the CAA Statistical Handbook, the "bible" on aviation statistics which provides detailed figures on aviation developments, has been issued by the Office of Aviation Information of the CAA. It is available from the Superintendent of Documents, Washington 25, D. C., at 50 cents.

Rio Grande Valley Airport Opened to Mexican Airline

The Civil Aeronautics Board on December 23, granted a temporary foreign air carrier permit to Aero Transportes, a Mexican corporation, authorizing the use by this airline of the Rio Grande Valley International Airport at Brownsville, Texas, for one year for air transportation between Brownsville and Monterrey, Mexico. President Truman approved the Board's order on December 22, 1948.

The Board's action was taken, at the request of the airline, on the principal ground that the airport at Matamoros, across the border 5 miles from Brownsville, is unsuitable for scheduled air transportation. The authorization will permit Aero Transportes to operate scheduled foreign air carrier service between Brownsville and Monterrey, Mexico, the next point on the applicant's route which extends to Mexico City, Tampico, Mazatlan, and other points in Mexico.

Aero Transportes has previously been authorized to serve Brownsville on a temporary basis because of the unsuitable condition of the Matamoros Airport. Due to the lack of equipment, service has never been inaugurated. This company has now obtained DC-3 aircraft, and is anxious to commence operations into Brownsville at the earliest possible moment. The Board believes that the authorization of foreign air transportation between Monterrey and Brownsville is in the public interest.

Civil Aviation Highlights

	1948	1947
Airports recorded with CAA, Dec. 1....	6,406	5,755
By type: 1		
Commercial.....	3,000	2,847
Municipal.....	2,044	1,815
CAA intermediate.....	162	179
Military.....	397	507
All others.....	803	407
Civil airports by class:		
Total.....	6,009	5,248
Class I and under.....	4,007	3,520
Class II.....	967	844
Class III.....	467	422
Class IV.....	361	311
Class V.....	132	100
Class VI and over.....	75	51
Total U. S. civil aircraft, Dec. 1....	96,390	93,741
Scheduled air carrier aircraft, Dec. 1....	1,070	961
Civil aircraft production, Oct.:		
Total.....	502	802
2-place models.....	156	390
3-, 4- and 5-place models.....	320	380
Over 5-place models.....	26	32
Certificates approved, Oct.:		
Student pilots.....	4,306	18,204
Private pilots.....	5,413	13,687
Commercial pilots.....	619	544
Airline transport pilots.....	98	111
Mechanics (original certificates).....	721	958
Ground instructors (original certificates).....	130	292
Flight instructor ratings.....	264	515
Instrument ratings.....	127	157
Traffic control activity, Oct.:		
Aircraft operations, CAA airport towers.....	1,475,243	1,666,191
Fix postings, CAA airway centers.....	858,427	892,204

Airport Operations

Washington National Airport operations, Nov.:		
Scheduled air carrier:		
Passengers departing.....	45,408	43,993
Passengers arriving.....	46,121	41,231
Aircraft arrivals and departures.....	9,805	7,950
Other aircraft arrivals and departures.....	3,971	3,364
Miami Airport operations, Oct.:		
Scheduled air carrier:		
Passengers departing.....	35,837	(?)
Passengers arriving.....	35,529	(?)
Aircraft arrivals and departures.....	7,061	6,180
Other aircraft arrivals and departures.....	8,794	6,983
San Francisco Municipal Airport operations, Oct.:		
Scheduled air carrier:		
Passengers departing.....	38,289	42,007
Passengers arriving.....	40,863	43,288
Aircraft arrivals and departures.....	6,871	6,517
Other aircraft arrivals and departures.....	4,798	6,622
Oakland Municipal Airport operations, Oct.:		
Scheduled air carrier:		
Passengers departing.....	6,126	5,557
Passengers arriving.....	5,065	4,657
Aircraft arrivals and departures.....	4,054	3,022
Other aircraft arrivals and departures.....	15,030	17,999

1 Airport type definitions: Commercial—Public use and public services, privately owned and operated. Municipal—Public use and public services, municipally owned and/or operated. CAA Intermediate—Public emergency use, no services, CAA operated. Military—Public restricted, military operated. All others—(a) Public emergency use only, no public services, privately owned for personal use; (b) Public emergency use only, no public services, Government-owned Forest Service, etc.

2 Not available.

Charles O. Cary Named ACC Executive Secretary

Charles O. Cary has been appointed Executive Secretary of the Air Coordinating Committee to succeed John Sherman, who recently submitted his resignation.

Mr. Cary, prior to his service with the Government, was employed by American Airlines in traffic and operations capacities and by Alaska Airlines as Superintendent of Operations. In June 1944 he became Executive Assistant to the Chairman of the Civil Aeronautics Board, Mr. L. Welch Pogue, and since May 1946 has been Special Assistant to Mr. John Nicholas Brown, Assistant Secretary of the Navy for Air and Member of the Air Coordinating Committee. A native of Boston, Mass., Mr. Cary attended Massachusetts Institute of Technology and Northwestern University.

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Regulations

OR-10-----Effective December 7, 1948

Amends §301.3(c) of the Organizational Regulations by adding thereto item (6) reading as follows:

§301.3 Public Information.--(c) Public Records. (6) Communications containing comments on proposed rules, which are received by the Board in response to notices of proposed rule making; provided, that any such communications made available for public inspection shall be made available only after the period set for the receipt of comments has expired.

OR-11-----Adopted December 14, 1948

In order to conform Chapter 1 of Title 14 to the scope and style of the Code of Federal Regulations, 1949 Edition, as prescribed by the regulations of the Administrative Committee of the Federal Register and approved by the President effective October 12, 1948, the following editorial changes are made, effective upon publication in the Federal Register:

1. The codification of Parts 301, 302, and 303 is hereby discontinued. Future amendments to this material will appear in the Notices section of the Federal Register.
2. The chapter is divided into two subchapters: Subchapter A--Civil Air Regulations, comprising Parts 1-199; and Subchapter B--Economic Regulations, comprising Parts 200-299.

OR-12-----Effective December 15, 1948

Amends the Organizational Regulations by revising paragraph (d) to read as follows:

(d). Institution of Court Proceedings. The Chief of the Office of Enforcement is authorized to institute and prosecute in the proper court, as agent of the Board, all necessary proceedings for the enforcement of subpoenas and for the enforcement of the provisions of the Act or any rule, regulation, requirement, or order thereunder, or any term, condition, or limitation of any certificate or permit, and for the punishment of all violations thereof.

SR-323-A-----Effective December 15, 1948

Extends until June 15, 1949, Special Civil Air Regulation SR-323, which expired December 15, 1948.

ER-136-----Adopted December 1, 1948

Interprets §292.1 of the Economic Regulations in order to assist irregular air carriers to conduct their operations in conformity with the Act and §292.1 of the Economic Regulations.

Safety Orders

S-170 revokes airman certificate of William Brown (July 16).

S-171 terminates proceedings in the matter of suspension of Edwin S. Alexander's pilot certificate (July 28).

S-172 suspends pilot certificate of Wade H. Booker for 6 months (July 23).

S-173 sustains refusal of the Administrator of Civil Aeronautics to issue a third-class medical certificate to John Doe, who is suffering from diabetes mellitus, which condition requires the regular use of protamine zinc insulin. (Aug. 13).

S-174 suspends for 40 days, pilot certificate of Buell Eugene Kester (Sept. 16).

S-175 affirms decision of examiner in dismissing complaint against Lyle Pedely (Sept. 27).

S-176 orders that Jack Wilson Howard may be issued a parachute technician certificate with master parachute rigger grade notwithstanding the requirements set forth in §253(b) of the CAR (Sept. 27).

S-177 denies petition of James Henry Preater for reconsideration of order prohibiting him from obtaining a pilot certificate for a period of two years (Sept. 30).

S-178 affirms denial by the Administrator of application of John Doe for a pilot certificate on the grounds that he did not meet the physical standards required by section 29.12(d) (Oct. 6).

S-179 changes from 6 months to 30 days, period of suspension of pilot certificate of Jack Kenneth Brown (Oct. 6).

S-180 revokes student pilot certificate of Gilbert Fischer (Oct. 19).

S-181 suspends for 90 days, pilot certificate of Leo S. Longoria (Oct. 19).

S-182 revokes transport pilot certificate of Charles Robert Sisto, for violation of Civil Air Regulations occurring at Mt. Riley, N. Mex. (Oct. 26).

S-183 denies petition of Robert Franklin Williams, for reconsideration of order suspending his pilot certificate for a period of 90 days (Oct. 27).

S-184 terminates period of suspension of private pilot certificate of Raymond Welsh (Oct. 27).

S-185 denies petition of John Wells Keeler, for reconsideration of order revoking his pilot certificate for a period of 1 year (Oct. 29).

S-186 denies petition of Charles Robert Sisto requesting the Board to stay its order of October 26, 1948, revoking his pilot certificate (Nov. 9).

S-187 suspends pilot certificate of Ansil Wayne Cole for a period of 12 months, commencing November 20, 1948 (Nov. 10).

S-188 suspends pilot certificate of Robert Eugene Richardson for 6 months, commencing on November 22, 1948 (Nov. 12).

S-189 modifies the Board's order dated July 8, 1948, in the matter of the suspension of pilot certificate of Herbert Seabourne to read that "respondent shall not be issued any type of pilot certificate prior to December 4, 1948" (Nov. 24).

S-190, S-191, S-192, S-193, and S-194 grant American Airlines, Braniff Airways, Delta Air Lines, National Airlines, and Pan American-Grace Airways, respectively, temporary exemption from the provisions of section 61.56 (or 41.320) of the Civil Air Regulations so as to permit the flying of four-engine aircraft without flight engineers pending the completion of the training and qualification program established by the carriers.

S-195 terminates proceedings against Norman Weston Carlson (Nov. 30).

S-196 suspends for 30 days, mechanic certificate of A. L. J. Gillette (Dec. 7).

S-197 suspends for 30 days, pilot certificate of C. J. Haines (Dec. 9).

S-198 denies petition of the Administrator for reconsideration of the decision in the case of Russell M. Sampson (Dec. 10).

S-199 revokes pilot certificate of William Phines Rayburn for low flying over a congested residential area (Dec. 10).

S-200 suspends for 3 months, pilot certificate of William Dale Crane, for flying in instrument weather conditions in violation of certain sections of the Civil Air Regulations (Dec. 10).

S-201 revokes pilot certificate of Axtentie T. Babinco (Dec. 10).

S-202 suspends for 3 months, pilot certificate of Homer Dean Smith (Dec. 14).

S-203 modifies order suspending commercial pilot certificate of Burton Smith Johnson, to make 45-day suspension commence to run on November 1, 1948 (Dec. 15).

S-204 affirms examiner's initial decision suspending for 12 months, pilot certificate of Neil Hastings Cargile, Jr. (Dec. 22).

Airline Orders

E-2167 grants certain air lines, the Postmaster General, the Los Angeles Chamber of Commerce, and the City and County of San Francisco leave to intervene in the matter of the application of Pan American Airways for an amendment of its certificate authorizing transportation between the United States and points in Latin America, and the intermediate point Guatemala City and the co-terminal points Los Angeles and San Francisco (Nov. 9).

E-2168 approves agreement between Braniff Airways and Chicago and Southern Air Lines for air conditioning services at Kansas City Municipal Airport (Nov. 9).

E-2169 approves agreement between Chicago and Southern Air Lines and Pan American for radio maintenance and aircraft repair at New Orleans (Nov. 9).

E-2170 orders temporary certificate issued to Robinson Airways for route No. 94 (order No. E-1736) reissued so as to reflect the transfer of said certificate to Robinson Airlines Corporation and approves acquisition of control of Robinson Airlines Corporation (Nov. 9).

E-2171 fixes the temporary mail rate for Robinson Airlines Corporation (formerly Robinson Aviation, Inc.) over its entire system (Nov. 9).

E-2172 dismisses petition of the Postmaster General for postponement of oral argument and reopening of the record in the Chicago Helicopter Service Case (Nov. 9).

E-2173 grants the State of New Mexico permission to intervene in the matter of the investigation to determine the need for service to Socorro, Hot Springs, and Las Cruces, N. Mex., and certain applications for certificates or amendments of certificates for service to Douglas, Ariz., and Lordsburg, Raton, and Artesia, N. Mex. (Nov. 10).

E-2174 orders an investigation of and suspends for 90 days, the round-trip proportional fares established by National Airlines (Nov. 10).

E-2175 grants certain parties leave to intervene in the Additional California-Nevada Service Case (Nov. 10).

E-2176 grants the Post Office Department leave to intervene in the matter of the application of Capital Airlines for an amendment of its certificate for routes Nos. 14 and 41 (Nov. 10).

E-2177 grants the Post Office Department leave to intervene in the matter of the petition of the city of Mitchell, S. Dak., and the Mitchell Chamber of Commerce for an amendment of the certificate of Mid-Continent Airlines to include Mitchell as an intermediate point on route No. 26 (Nov. 10).

E-2178 order and opinion issues an amended temporary certificate to Challenger Airlines for route No. 74, so as to provide that such certificate shall continue in effect up to and including March 30, 1950 (Nov. 10).

E-2179 approves agreement between Pan American Airways and Compania Mexicana de Aviacion, (COPA) relating to transportation of passengers, express and cargo over each other's lines (Nov. 12).

E-2180 approves agreement between Continental Air Lines and Slick Airways relating to overhaul service on various aircraft instruments (Nov. 12).

E-2181 approves agreement between United Air Lines and Scandinavian Airlines System relating to interchange of passenger traffic (Nov. 12).

E-2182 reissues the certificate of All American Aviation for route No. 49, so as to reflect the change in the corporate name from All American Aviation to All American Airways, Inc. (Nov. 12).

E-2183 grants temporary exemption to Boris Sergievsky from section 292.1 of the Economic Regulations, so as to permit him to operate as a Small Irregular Carrier (Nov. 12).

E-2184 modifies rules affecting minimum air freight rates so that rates to and from Teterboro and Newark, N. J., shall be the same as those to and from New York, N. Y. (Nov. 12).

E-2185 approves agreement between Delta Air Lines and Chicago and Southern relating to lease of space (Nov. 12).

E-2186 denies Northwest Airlines leave to intervene in the matter of the suspension and revocation of Letter of Registration No. 803 issued to Transocean Air Lines (Nov. 12).

E-2187 orders certain air lines to submit to the Board operational and financial data resulting from fares received under family fare plans (Nov. 12).

E-2188 fixes the temporary mail rate for Northeast Airlines over its entire system (Nov. 12).

E-2189 denies petitions of Air Dispatch and Air Freight Forwarder Association for reconsideration of orders Nos. E-2035 and E-2086, which denies their petitions for leave to intervene in the matter of the mail rates set for Braniff Airways over its domestic system (Nov. 12).

E-2190 denies petitions of Air Dispatch and Air Freight Forwarder Association for reconsideration of orders Nos. E-2036 and E-2087 which denies their petitions for leave to intervene in the matter of the mail rates set for Delta Air Lines over its domestic system (Nov. 12).

E-2191 orders investigation into and an additional suspension for 90 days of a tariff rule filed by Colonial Airlines providing for free or reduced-rate transportation (Nov. 12).

E-2192 orders investigation of, and suspends for 90 days, certain rules and regulations in the matter of round-trip excursion fares proposed by TWA (Nov. 15).

E-2193 dismisses application of Raymond H. Hattson for a certificate of public convenience and necessity (Nov. 16).

E-2194 denies National Airlines and Capital Airlines exemption to provide free transportation for one Red Cross nurse and

23 passengers between Pittsburgh, Pa., and Wilmington, N. C., and return (Nov. 16).

E-2195 denies petition of Braniff Airways for consolidation of its application for a certificate to operate between the United States and Mexico City, with that of Pan American Airways in docket No. 3277 for an amendment of its certificate with respect to air transportation between the United States and various points in Latin America (Nov. 16).

E-2196 grants the International Association of Machinists and National Airlines leave to intervene in the "Through Service Proceeding" (Nov. 16).

E-2197 grants Hawaiian Airlines temporary exemption from the provisions of section 403(b) of the Act, so as to grant free transportation to Messrs. Grace and Banken, airways forecasters employed by the United States Weather Bureau (Nov. 16).

E-2198 approves agreements between Hawaiian Airlines and Inter-Island Steam Navigation Co. for rental of office space (Nov. 17).

E-2199 grants United Air Lines, Chicago and Southern Air Lines, the city of Cincinnati, Ohio, the Louisville Board of Trade, and the Louisville and Jefferson County Air Board, Louisville, Ky., leave to intervene in the matter of the applications of TWA and others for amendments of certificates (Nov. 17).

E-2200 denies petition of Braniff Airways that the Board modify order serial No. E-2108 so as to request additional data in the Air Freight Case (Nov. 17).

E-2201 consolidates certain applications in the "Service to New England" case; permits Skyway Corporation to intervene in the case; denies and dismisses other motions and petitions (Nov. 17).

E-2202 approves interlocking relationships existing as a result of the election of W. T. Evans to a directorship in Arizona Airways (Nov. 17).

E-2203 terminates suspension of letter of registration of Blatz Airlines issued on February 4, 1948 (Nov. 17).

E-2204 denies and dismisses petitions of certain air lines and other parties for rehearing and reargument of the "Additional Service to Florida" case (Nov. 17).

E-2205 denies motion of Southwest Airways in the matter of the application of Western Air Lines and Arizona Airways for an order approving the agreement for the sale of certain properties and the transfer of a portion of the certificates of public convenience and necessity for Route No. 13 (Nov. 17).

E-2206 orders Colonial Airlines to submit special reports regarding financial and operational data resulting from Colonial's round-trip excursion fares (Nov. 16).

E-2207 grants Pan American permission to serve Portland, Oreg., on or about November 21, 1948, through the use of Portland Airport (Nov. 18).

E-2208 amends order serial No. E-2043, as amended by order No. E-2128, so as to permit Monarch Air Lines to omit Gallup, N. Mex., as a stop on its last daily southbound flight over segment 2 of route No. 73 until such time as the airport is suitable for night operations or until December 15, 1948, whichever shall first occur (Nov. 18).

E-2209 approves interlocking relationships existing as the result of the holding of certain positions by John H. Moores in the Railway Express Agency and Railway Express Motor Transport (Nov. 11).

E-2210 approves agreements between American Airlines and Trans-Canada Airlines relating to general ground services and routine maintenance at LaGuardia Airport, New York City (Nov. 18).

E-2211 grants Milton Gilbert and Edward Jenkins, doing business as Economy Airways Company, exemption from the provisions of paragraph (d)(13) of section 292.1 of the Economic Regulations, so as to permit the transfer of Letter of Registration No. 1847 to Economy Airways (Nov. 18).

E-2212 grants Northwest Airlines permission to serve Honolulu, Hawaii, on route No. 95, through the use of Honolulu Municipal Airport on or about December 2, 1948 (Nov. 18).

E-2213 grants Northwest Airlines permission to serve Seattle-Tacoma, Wash., on route No. 95, through the use of Seattle-Tacoma Airport on or about December 2, 1948 (Nov. 18).

E-2214 grants the city of Yuma, the Chamber of Commerce of Yuma, the Junior Chamber of Commerce of Yuma, and the County of Yuma, Ariz., leave to intervene in the matter of the application of Western Air Lines, and Arizona Airways for an order approving the agreement for the sale of certain properties and the transfer of a portion of the certificate for route No. 13 (Nov. 18).

E-2215 grants certain parties leave to intervene in the Florida Trunkline Service Case (Nov. 19).

E-2216 grants Pan American permission to serve Seattle-Tacoma, Wash., through the use of Boeing Airport on or about November 21, 1948 (Nov. 19).

E-2217 grants Western Air Lines and Inland Air Lines leave to intervene in the matter of the application of Northwest Airlines for amendment of its certificate for route No. 3, so as to remove restrictions with respect to Great Falls and Kallispell (Nov. 19).

E-2218 grants certain parties leave to intervene in the Additional California-Nevada Service Case (Nov. 23).

E-2219 grants the Chamber of Commerce, city of Great Falls, Mont., leave to intervene in the matter of the application of Northwest Airlines for amendment of its certificate for route No. 3, so as to remove restrictions with respect to Great Falls and Kallispell (Nov. 23).

E-2220 approves agreement between United Air Lines and American Airlines for lease of two aircraft engines (Nov. 24).

E-2221 approves agreement between United Air Lines and Eastern Air Lines for janitor service (Nov. 24).

E-2222 grants the American Society of Travel Agents leave to intervene in the matter of resolutions adopted at the section meetings of Traffic Conferences Nos. 2 and 3 of IATA, relating to agents (Nov. 24).

E-2223 consolidates into one proceeding the reopened Air Freight Case and the reopened Boston-New York-Atlanta-New Orleans case, for the purpose of hearing only (Nov. 24).

E-2224 grants Braniff Airways leave to intervene in the matter of the application of Pan American Airways for amendment of its certificate authorizing air transportation between the United States and points in Latin America, so as to authorize air transportation between the intermediate point Guatemala City and the co-terminal points Los Angeles and San Francisco (Nov. 24).

E-2225 terminates exemption under §292.2 of the Economic Regulations granted to Toivo A. Aho and Dallas L. Bowen, doing business as AHO Flying Service, so that Toivo A. Aho may qualify as an Alaskan pilot-owner (Nov. 24).

E-2226 terminates exemption under §292.2 of the Economic Regulations granted to Kenneth H. Armstrong, doing business as Armstrong Air Service, so that he may qualify as an Alaskan pilot-owner (Nov. 24).

E-2227 grants Pan American Airways permission to inaugurate non-stop service between Brussels, Belgium, and Stuttgart, Germany, and between Stuttgart and Prague, Czechoslovakia, on its North Atlantic route (Nov. 24).

E-2228 amends order No. E-2025 in the matter of the investigation of the transfers of the routes and property of National Airlines, so as to include Key West and Tampa, Fla., as points on National's routes (Nov. 24).

E-2229 dismisses proceeding of investigation and suspension instituted in Docket No. 3522, in the matter of reduced fares for group passenger travel by certain air carriers (Nov. 24).

E-2230 approves agreement between Western Air Lines and American Airlines relating to station services (Nov. 24).

E-2231 denies petition of Eastern Air Lines for reconsideration of order No. E-1972 in the matter of the applications of TWA and other applicants for amendments of certificates (Nov. 24).

E-2232 orders investigation into, and suspends for 90 days, certain round-trip excursion fares proposed by Challenger Airlines (Nov. 24).

E-2233 and E-2234 opinion and order issues a temporary certificate to Helicopter Air Service permitting it to transport property and mail in the Chicago area for 5 years (Nov. 24).

E-2235 permits the Commonwealth of Massachusetts to intervene in the Additional California-Nevada Service case (Nov. 26).

E-2236 denies petition of the city of Du Bois, Pa., for leave to intervene in the Middle Atlantic Area case (Nov. 26).

E-2237 orders National Airlines to show cause why the Board should not make final the temporary mail rates as set forth in an attached statement to be paid the carrier for the transportation of mail over its entire system (Nov. 29).

E-2238 dismisses petition of Pioneer Air Lines for the Board to determine a temporary mail rate over its route No. 64 and orders the carrier to show cause why the Board should not make final the rates set forth in the attached statement to be paid the carrier for the transportation of mail over its entire system (Nov. 29).

E-2239 grants American Airlines, United Air Lines and TWA leave to intervene in the matter of the application of Air America for an exemption under §416(b) of the Act; denies application of Air America for a temporary exemption authorizing it to engage in scheduled air carrier operations of a coach-type service (Nov. 29).

E-2240 approves interlocking relationships existing as a result of the holding of certain positions by Richard W. Courts in Delta Air Lines and Southeastern Greyhound Lines (Nov. 29).

E-2241 amends order serial Nos. E-2012 and E-2013 so as to extend until December 15, 1948, the date of temporary exemption granted to Pan American Airways and Northwest Airlines for emergency transportation between Alaskan points and Seattle, Wash. (Nov. 30).

E-2242 grants the city of Los Angeles leave to intervene in the matter of the application of Pan American Airways for an amendment of its certificate with respect to certain Latin American service (Nov. 30).

E-2243 orders investigation of, and suspends for 90 days, certain rules and tariffs in the matter of round-trip excursion fares proposed by Braniff Airways and TWA; consolidates the proceedings into Docket No. 3564 et al (Nov. 30).

E-2244 orders investigation of and suspends until February 28, 1949, certain rules and tariffs, in the matter of round-trip excursion fares proposed by Florida Airways (Nov. 30).

E-2245 terminates exemption granted to Oscar Winchell, doing business as Oscar Winchell Flying Service, under §292.2(c)(1) of the Economic Regulations, so as to qualify him as an Alaskan pilot-owner (Nov. 30).

E-2246 severs application of Oscar Winchell, d.b.a. Oscar Winchell Flying Service, from Docket No. 865 et al and dismisses proceeding (Nov. 30).

E-2247 fixes \$624,517 as the mail rate for 1945 for American Overseas Airlines in its trans-Atlantic operations (Nov. 29).

E-2248 grants Delta permission to serve Macon, Ga., through the use of Cochran Field (Nov. 30).

E-2249 opinion and order approves agreement between TWA and the Imperial Ethiopian Government relating to the establishment of Ethiopian Air Lines (Nov. 30).

E-2250 grants American Airlines temporary exemption from the provisions of section 292.4 of the Economic Regulations and § 416 of the Act, so as to provide free transportation for T. A. Hansson, an employee of the Royal Swedish Board of Aviation, while studying and investigating air traffic methods and facilities on the routes of American (Nov. 30).

E-2251 approves interlocking relationships existing as a result of the holding of certain positions by Joseph E. Crosson in Pacific Northern Airlines and the Northwest Air Service Company (Nov. 30).

E-2252 grants Eastern permission to serve Macon, Ga., through the use of Cochran Field (Dec. 1).

E-2253 grants certain cities and parties leave to intervene in the Additional California-Nevada Service case (Dec. 1).

E-2254 denies petition of Delta for reconsideration of the Board's order of investigation and suspension of its air freight tariff, order serial No. E-2104, dated October 18, 1948 (Dec. 1).

E-2255 approves agreement between United and TWA for leasing of baggage shelter space (Nov. 30).

E-2256 approves change in "Approved Service Plan-Foreign Air Transportation" for Pan American, so as to authorize it to serve Basra, Iraq (Dec. 1).

E-2257 authorizes change in service pattern for Wisconsin Central over route No. 86; revokes order serial Nos. E-1945 and E-2030 (Dec. 2).

E-2258 approves application of Alaskan Airlines for a loan of \$232,000 through the Reconstruction Finance Corp. (Dec. 3).

E-2259 grants certain parties leave to intervene in the Florida Trunkline Service case (Dec. 3).

E-2260 grants temporary exemption to Los Angeles Airways from the provisions of section 401(a) of the Act insofar as said provisions prevent applicant from engaging in air transportation of mail and property with rotary-wing aircraft to and from San Bernardino, Calif. (Dec. 3).

E-2261 extends temporary certificate of Monarch Air Lines for

route No. 73 until March 30, 1950. Issued with an opinion (Dec. 3).

E-2262 grants certain parties leave to intervene in the matter of the investigation of the transfers of the routes and property of National Airlines (Dec. 6).

E-2263 amends order No. E-2055 which authorizes West Coast Airlines to change the service pattern on segment 1 of route No. 77 (Dec. 3).

E-2264 approves agreement between TWA and Braniff relating to the furnishing of ramp equipment at St. Louis, Mo., Amarillo, Tex., and Indianapolis, Ind. (Dec. 6).

E-2265 approves agreements between TWA and Chicago and Southern Air Lines relating to certain line service facilities at Fort Wayne, Ind. (Dec. 6).

E-2266 approves agreement between American Airlines, American Overseas Airlines, and Chicago and Southern relating to issuance of tickets or exchange orders (Dec. 6).

E-2267 orders TWA to show cause why the Board should not fix a certain temporary mail rate in its trans-Atlantic operations (Dec. 7).

E-2268 dismisses application of Mid-Continent Airlines for an amendment of its certificate (Dec. 7).

E-2269 denies petitions of TWA, United, and Colonial for reconsideration of opinion and order No. E-1904 in the Middle Atlantic Area case; defers for further consideration petitions of said airlines for reconsideration and vacation of order No. E-1905 (Dec. 7).

E-2270 dismisses complaint of Eastern in the matter of family excursion fares established by Capital Airlines (Dec. 7).

E-2271 approves agreement between Northwest Airlines and Western for complete ground services at Seattle (Dec. 7).

E-2272 grants Nationwide Air Transport Service exemption from the provisions of §408 of the Act, insofar as said provisions would otherwise prevent applicant from acquiring and operating Nationwide Maintenance Service and Frontier Air motive (Dec. 7).

E-2273 permits TWA to substitute Zurich and Geneva, Switzerland, for Berne, Switzerland, in its trans-Atlantic route; revokes order serial No. 4314 (Dec. 7).

E-2274 approves agreement between Chicago and Southern and Braniff for complete station operation services at Little Rock, Ark. (Dec. 7).

E-2275 amends order No. E-2025, as amended by order No. E-2228, in the matter of the investigation of the transfers of the routes and property of National Airlines (Dec. 8).

E-2276 dismisses petition of Caribbean-Atlantic Airlines in the matter of determining mail rates over its route No. 50 (Dec. 8).

E-2277 amends order No. E-1904 in the matter of the application of Capital Airlines for an amendment of its certificate for route No. 14; severs portion of application of American Air Lines from Docket No. 1980 and assigns it to Docket No. 3583; consolidates application of Northwest Airlines in Docket No. 2272 and that of American into one proceeding (Dec. 9).

E-2278 dismisses application of Edward C. Hoyer, doing business as Hoyer's Standard Service, for a certificate of public convenience and necessity (Dec. 9).

E-2279 grants certain parties leave to intervene in the matter of the investigation of the transfers of the routes and property of National Airlines (Dec. 10).

E-2280 grants certain parties leave to intervene in the Additional California-Nevada Service case (Dec. 10).

E-2281 suspends Letters of Registration of certain large irregular carriers for failure to file their flight reports for the third quarter of 1948 (Dec. 10).

E-2282 grants certain parties leave to intervene in the matter of the investigation of the transfers of the routes and property of National Airlines (Dec. 10).

Airman Orders

SD-1190 revokes private pilot certificate of James Joseph Johnson, Craig, Colo., for flying over a highway near Craig at an altitude of less than 500 feet and performing acrobatics at an altitude of less than 1,500 feet. In buzzing some friends on the highway, he hit the jeep in which they were riding, seriously injuring two of the three occupants of the vehicle and tearing off its left landing gear (Oct. 6).

SD-1191 revokes student pilot certificate of Grover L. Voss, Rosholt, S. Dak., for flying outside the local area designated by his instructor and for low flying. He flew at low altitude over his parents' home, and in attempting to make a turn, a wing tip struck the ground, causing the plane to crash, resulting in complete demolition of the aircraft and serious injuries to himself (Oct. 5).

SD-1192 suspends for 60 days, private pilot certificate of Edward G. Fryatt, Wichita, Kans., for flying through the control zone of an airport without clearance from the control tower when weather conditions required such clearance (Oct. 5).

SD-1193 suspends for 90 days, private pilot certificate of Joseph L. A. Gallant, Holly Hill, Fla., for carrying a passenger for hire (Oct. 13).

SD-1194 suspends for 30 days, commercial pilot certificate of James D. Boss, Jr., Fort Pierce, Fla., for piloting an aircraft in instrument weather conditions when he did not hold a valid instrument rating (Sept. 28).

SD-1195 suspends for 60 days, private pilot certificate of Philip Woodrow Bradford, Denver, Colo., for low flying over a congested area of Denver (Sept. 22).

SD-1196 suspends for 45 days, student pilot certificate of Mickey M. Gappa, Emmetsburg, Iowa, for making a solo flight when he had not passed the required written examination (Sept. 16).

SD-1197 suspends for 3 months, commercial pilot and flight instructor ratings of John Oak Chapman for low flying with a passenger over a congested area of Belmont, Iowa (Sept. 15).

SD-1198 revokes student pilot certificate of Robert H. Knutson, Emmetsburg, Iowa, for operating an aircraft when he did not hold a valid pilot certificate and for carrying passengers (Sept. 28).

SD-1199 suspends for 120 days, pilot certificate of Robert D. Graves, Lincoln, Neb. (Sept. 14).

SD-1200 terminates proceedings in the case of Bryce Frits, Jr., Port Byron, Ill., who paid \$100 in full satisfaction of the penalty in connection with the CAR violation alleged (Sept. 23).

SD-1201 revokes private pilot certificate of Glen G. McDonald, Indianapolis, Ind., for making low passes over the town of Clermont, Ind. (Sept. 22).

SD-1202 suspends for 90 days, student pilot certificate of James C. Firestone, Fort Wayne, Ind., for low flying over Fort Wayne (Oct. 6).

SD-1203 suspends for 90 days, student pilot certificate of Leland Starke Hall, Berea, Ohio, for carrying a passenger. He had previously paid a fine of \$50 in a Michigan court (Sept. 20).

SD-1204 dismisses complaint against Kenneth Thomas Mitchell, Lombard, Ill. (Sept. 21).

SD-1205 suspends for 30 days, private pilot certificate of John Robert Fritz, Topeka, Kans., for low flying over a congested area of Topeka (Oct. 14).

SD-1206 suspends for 9 months, private pilot certificate of Rex Rhoades, Casper, Wyo., for low flying over Bridgeport, Nebr. The plane he was piloting crashed when he attempted a landing in an unsuitable field (Oct. 13).

SD-1207 suspends for 30 days, commercial pilot certificate of Lloyd M. Whitlock for taking off from Holman Field, near St. Paul, Minn., at night when the plane was not equipped with navigation or landing lights. The flight terminated in a crash near Osseo, Minn., caused by engine failure (Aug. 30).

SD-1208 terminates proceedings against Louis T. Fennell (Oct. 21).

SD-1209 revokes student pilot certificate of Walter R. Busch for carrying passengers and doing acrobatics at low altitudes over Wildrose, N. Dak. (Oct. 19).

SD-1210 revokes student pilot certificate of Benjamin Pisotchi, St. Paul, Minn., for carrying a passenger (Oct. 21).

SD-1211 revokes student pilot certificate of Carl Edward Ison, Portsmouth, Ohio, for carrying a passenger (Oct. 22).

SD-1212 revokes student pilot certificate of Raymond Richard Schunk, Winner, S. Dak., for carrying a passenger (Oct. 20).

SD-1213 suspends for 60 days, private pilot certificate of Ralph Elmo Jackson, Marion, Kans., for carrying a passenger when he had not within the preceding 90 days had at least five take-offs and landings in an aircraft of the type and class of the craft flown (Oct. 21).

SD-1214 terminates proceedings in the case of Franklin Jay Crow, Marshall, Minn. (Oct. 19).

SD-1215 terminates proceedings against Don Miller, New Orleans, La., holder of a commercial pilot certificate, for landing at Lambert Field, St. Louis, without having obtained clearance from air traffic control. He had voluntarily surrendered his certificate for 30 days (Oct. 20).

SD-1216 suspends for 6 months, student pilot certificate of Eugene V. Bullock, Cozad, Nebr., for low flying over Lyons, Colo. (Oct. 22).

SD-1217 suspends for 4 months, student pilot certificate of Russell Johnson, Denver, Colo., for low flying over a school at Liberal, Kans., during recess while children were playing in the school yard (Oct. 20).

SD-1218 suspends for 45 days, private pilot certificate of Miles Standish Firnhaber, for careless operation of an aircraft at the Waukesha County Airport, Waukesha, Wis. (Sept. 24).

SD-1219 suspends for 20 days, private pilot certificate of Harry Harvey Ptashkin, for careless operation of an aircraft at General Mitchell Field, Milwaukee, Wis. (Sept. 20).

SD-1220 suspends for 30 days, student pilot certificate of William Bishop, Iowa, Ill., for piloting an aircraft outside the local area designated by his instructor when he had not had at least 10 solo flight hours (Sept. 22).

SD-1221 revokes commercial pilot certificate of Roland Reed, Chinook, Mont., for piloting an aircraft when he did not have in his possession a valid medical certificate and for low flying over ranches near Chinook. In an attempted landing on an unsuitable landing strip, the aircraft crashed, injuring the pilot and a passenger (Sept. 21).

SD-1222 revokes student pilot certificate of Arthur B. Kinley, Spokane, Wash., for failing to surrender his certificate in accordance with an order of the Board, which had suspended his certificate for six months (Sept. 21).

SD-1223 revokes private pilot certificate of Frank Edward Colmann, Nevada, Oreg., for flying an aircraft over a potato field at such a low altitude that a wing of the aircraft struck William C. Beasley, who was working in the field, on the head and seriously injured him (Sept. 18).

SD-1224 revokes student pilot certificate of James B. Kayler, Whidby Island, Wash., for carrying a passenger. In taking off from a field, the aircraft ground looped and crashed. No injuries were sustained by the pilot and his passenger but the aircraft received major damage (Sept. 18).

SD-1225 suspends for 6 months, student pilot certificate of William Budd Killpack, Great Falls, Mont., for low flying over a rural ranch area. The aircraft crashed and the pilot sustained a broken back (Sept. 18).

SD-1226 suspends for 6 months, student pilot certificate of Eldon C. Bird, Rigby, Idaho, for low flying over his father's farm house (Sept. 11).

SD-1227 suspends for 6 months, commercial pilot certificate of John Paul Hocker, for low flying over persons and structures at Moses Lake, Wash. (Aug. 26).

SD-1228 suspends for 7 days, certificate of Newport Air Service, Newport, Oreg., for failure to maintain adequate personnel, facilities and equipment, and for failure to keep accurate records (Sept. 1).

SD-1229 revokes student pilot certificate of Earl Leroy Howery, Devon, Mont., for carrying a passenger. Howery landed the plane and got out, leaving the engine running. The passenger then climbed out of the plane and in so doing, somehow got under the propeller, which struck him, resulting in serious injuries (Sept. 4).

SD-1230 revokes private pilot certificate of Harry Leon Randall, Gorham, Maine, for dropping a bag of lime upon a home in Gorham. The bag landed on the porch roof, penetrating it and missed three children by a few feet; also for failing to observe other traffic in the vicinity and over Hilltop Airport, West Buxton, Maine (Oct. 6).

SD-1231 revokes student pilot certificate of Russell Wise, Rainier, Wash., for carrying a passenger. While attempting to land on an emergency landing strip, he caused the aircraft to stall, resulting in a crash and serious injuries to himself and his passenger (Sept. 18).

SD-1232 revokes commercial pilot certificate of Donald E. Hammack, Kansas City, Mo., for low flying and performing acrobatic maneuvers over Kansas City (Oct. 19).

SD-1233 revokes commercial pilot certificate of Marshall Johnson, Hinckley, Minn., for executing dangerous aerobatics at low altitudes while participating in an air show at Watertown, S. Dak. (Oct. 20).

SD-1234 suspends for 90 days, commercial pilot certificate of Glenn H. Eaton, Dayton, Ohio, for piloting an aircraft from Vichy, Mo., to St. Louis during the hours of darkness when the aircraft did not display position lights (Oct. 22).

SD-1235 suspends for 3 months, private pilot certificate of Don LeRoy Peckenschneider, Calamus, Iowa, for low flying over De Witt, Iowa (Sept. 13).

SD-1236 suspends for 6 months, student pilot certificate of Rudolph Gilbertson, Vida, Mont., for carrying passengers. He had logged sufficient hours to make him eligible for a private pilot certificate but had not qualified for one (Sept. 14).

(Continued on page 10)

Administrator's Regulations

(January 1, 1949)

Note: Date of publication in the Federal Register and the price of that issue of the Federal Register are indicated, in parentheses. Copies of the Federal Register may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Remittances should be by check or money order, payable to the Superintendent. Currency is sent at sender's risk.

Part 405—Procedure of the Civil Aeronautics Administration. (Published as Part 651; September 11, 1946—Part 2, Section 2, 406.)

Amendment 1. (November 13, 1946. Out of print.)

Amendment 2. (December 4, 1946. Out of print.)

Amendment 3. (January 3, 1947. 15¢.)

Amendment 4. (January 7, 1947. 15¢.)

Amendment 5. (April 8, 1947. 15¢.)

Amendment 6. (April 30, 1947. 15¢.)

Amendment 7. (September 16, 1947. 20¢.)

Amendment 8. (June 5, 1948. 15¢.)

Amendment. (September 11, 1948. 15¢.)

Part 406—Rules of Practice Governing Proceedings to Alter Amend, or Modify Certificates. (Published as Part 652; March 27, 1947. 15¢.)

Part 450—Inter-American Aviation Training Grants. (Published as Part 690; May 21, 1948. 15¢.)

Part 501—Aircraft Registration Certificates. (April 30, 1947. 15¢.)

Part 502—Dealers' Aircraft Registration Certificates. (April 30, 1947. 15¢.)

Part 503—Recordation of Aircraft Ownership. (September 11, 1948. 15¢.)

Part 504—Recordation of Encumbrances Against Specifically Identified Aircraft Engines. (September 11, 1948. 15¢.)

Part 505—Recordation of Encumbrances Against Aircraft Engines, Propellers, Appliances, or Spare Parts. (September 11, 1948. 15¢.)

Part 531—Seizure of Aircraft. (December 13, 1941; Out of print.)

Part 559—Federal Aid to Public Agencies for Development of Public Airports. (March 18, 1948. 15¢.)

Amendment 1. (Apr. 30—corrected May 12—1948. 15¢ each.)

Amendment 2. (June 11, 1948. 15¢.)

Amendment 3. (November 4, 1948. 15¢.)

Amendment 4. (December 14, 1948. 15¢.)

Part 555—Acquisition by Public Agencies for Public Airport Purposes of Lands Owned or Controlled by the United States. (January 9, 1947. 15¢.)

Amendment 1. (February 21, 1947. 15¢.)

Amendment 2. (April 1, 1948. 15¢.)

Part 560—Claims for Reimbursement for Rehabilitation or Repair of Public Airports Damaged by Federal Agencies. (January 9, 1947. 15¢.)

Amendment 1. (October 21, 1948. 15¢.)

Part 570—General Regulations of Washington National Airport. (Published as Part 510; January 23, 1947. 15¢.)

Amendment 1. (December 30, 1948. Pt. 1 20¢.)

Part 571—Aeronautical Rules for the Washington National Airport. (Published as Part 511; January 23, 1947. 15¢.)

Part 600—Designation of Civil Airways. (June 28, 1947. 15¢.)

Amendment 1. (September 16, 1947. 20¢.)

Amendment 2. (December 3, 1947. 15¢.)

Amendment 3. (March 6, 1948. 15¢.)

Amendment 4. (April 27, 1948. 15¢.)

Amendment 5. (May 15, 1948. 15¢.)

Amendment 6. (June 29, 1948. 15¢.)

Amendment 7. (August 17, 1948. 15¢.)

Amendment 8. (September 30, 1948. 15¢.)

Amendment 9. (October 15, 1948. 15¢.)

Amendment 10. (October 21, 1948. 15¢.)

Amendment 11. (November 30, 1948. 15¢.)

Amendment 12. (December 4, 1948. 15¢.)

Amendment 17. (December 29, 1948. 30¢.)

Part 601—Designation of Control Areas, Control Zones, and Reporting Points. (June 28, 1947. 15¢.)

Amendment 1. (September 16, 1947. 20¢.)

Amendment 2. (October 15, 1947. 15¢.)

Amendment 3. (October 23, 1947. 15¢.)

Amendment 4. (December 3, 1947. 15¢.)

Amendment 5. (March 6, 1948. 15¢.)

Amendment 6. (April 27, 1948. 15¢.)

Amendment 7. (May 15, 1948. 15¢.)

Amendment 8. (June 29—corrected July 16—1948. 15¢ each.)

Amendment 9. (July 9, 1948. 15¢.)

Amendment 10. (August 17, 1948. 15¢.)

Amendment 11. (August 31, 1948. 15¢.)

Amendment 12. (September 30, 1948. 15¢.)

Amendment 13. (October 15, 1948. 15¢.)

Amendment 14. (October 21, 1948. 15¢.)

Amendment 15. (November 30, 1948. 15¢.)

Amendment 16. (December 4, 1948. 15¢.)

Amendment 17. (December 29, 1948. 30¢.)

Part 609—Standard Instrument Approach Procedure. (March 19, 1948. 15¢.)

Amendment 1. (September 11, 1948. 15¢.)

Part 610—IFR Altitude Minimums. (November 19, 1947. 15¢.)

Amendment 1. (November 26, 1947. 15¢.)

Amendment 2. (April 3, 1948. 15¢.)

Part 625—Notice of Construction or Alteration. (June 26, 1948. 15¢.)

Part 635—Reproduction and Dissemination of Current Examination Materials. (Published as Part 532; January 19, 1943. Out of print.)

*Text of Part 531 may be obtained without charge from CAA Office of Aviation Information, Department of Commerce, Washington 25, D. C.

Scheduled Air Carrier Operations

[Source: CAB Form 41]

Domestic: January–October 1948, 1947

Operator	Revenue miles		Revenue passengers		Revenue passenger-miles (000)		Passenger seat-miles (000)	
	January–October		January–October		January–October		January–October	
	1948	1947	1948	1947	1948	1947	1948	1947
Trunk Lines								
American Airlines	46,588,156	49,571,350	2,333,182	2,392,586	1,081,730	1,199,199	1,797,340	1,682,306
Braniff Airways	9,132,786	9,183,552	470,450	495,952	161,769	167,573	293,817	267,178
Capital Airlines (PCA)	14,513,776	13,818,127	864,159	946,269	229,586	247,578	464,976	457,203
Chicago & Southern Air Lines	5,862,788	5,938,904	234,465	241,097	88,693	94,756	154,907	159,103
Colonial Airlines	2,511,936	2,700,963	120,492	118,312	33,329	32,994	53,002	53,432
Continental Air Lines	4,676,801	4,283,294	136,411	146,531	49,687	50,612	96,351	88,285
Delta Air Lines	10,821,515	9,767,599	406,330	421,323	152,512	171,619	290,665	274,323
Eastern Air Lines	40,991,117	37,777,246	1,683,245	1,419,163	820,407	724,405	1,365,194	1,175,920
Inland Air Lines	1,923,378	1,847,505	62,097	67,784	22,790	23,984	37,918	36,074
Mid-Continent Airlines	6,664,783	5,570,666	264,225	230,635	78,554	70,245	133,659	112,633
National Airlines	4,442,766	7,871,389	127,463	264,996	68,728	136,766	184,372	244,892
Northeast Airlines	2,861,862	3,378,503	235,984	278,321	45,183	53,432	93,677	104,416
Pioneer Air Lines	14,138,289	14,406,838	531,982	566,046	281,903	303,901	482,189	426,827
Transcontinental & Western Air	45,410,863	40,220,227	1,037,163	888,522	716,592	679,669	1,210,687	1,012,077
United Air Lines	48,830,942	50,357,848	1,640,785	1,678,953	985,695	1,045,298	1,480,444	1,360,940
Western Air Lines	5,263,964	6,305,951	231,735	366,179	90,775	148,363	161,936	233,106
Trunk Total	264,665,722	262,999,962	10,380,108	10,522,669	4,907,933	5,150,394	8,301,134	7,687,815
Index (1947=100)	100.63	100.00	98.65	100.00	95.29	100.00	107.98	100.00
Feeder Lines								
All American Aviation	1,466,533	1,491,326	0	0	0	0	0	0
Challenger Airlines	1,148,467	418,666	18,291	7,906	4,620	1,984	23,257	8,845
Empire Air Lines	830,040	775,885	18,207	10,426	3,952	2,245	15,516	7,758
Florida Airways	683,803	546,877	10,345	5,409	1,391	720	5,401	4,145
Los Angeles Airways	227,141	9,853	0	0	0	0	0	0
Monarch Air Lines	1,371,922	967,920	24,133	14,917	5,761	3,245	24,641	16,172
Piedmont Aviation	1,234,642	30,685	76,551	51,111	20,406	13,527	66,068	41,209
Pioneer Air Lines	2,751,405	1,710,068	76,551	51,111	20,406	13,527	66,068	41,209
Robinson Airlines	60,708	3,095	0	453	—	—	1,275	—
Southwest Airways	1,953,267	1,458,672	80,727	71,235	14,713	12,617	42,224	29,305
Trans-Texas Airways	1,463,227	57,062	16,472	402	3,936	75	30,727	1,198
West Coast Airlines	1,043,588	603,880	60,437	35,894	7,550	4,078	20,160	12,782
Wisconsin-Central Airlines	646,193	9,496	0	—	1,665	—	5,683	—
Feeder Total	14,880,931	8,040,209	348,439	197,300	71,651	38,491	260,903	121,414
Index (1947=100)	185.08	100.00	176.60	100.00	186.15	100.00	214.89	100.00
Territorial Lines								
Caribbean-Atlantic Airlines	344,439	329,460	61,554	56,077	3,869	3,450	8,719	7,951
Hawaiian Airlines	2,742,976	2,194,544	292,699	253,458	41,083	35,230	60,397	45,917
Territorial Total	3,087,415	2,524,004	354,253	309,535	44,952	38,680	69,116	53,868
Index	122.32	100.00	114.45	100.00	116.22	100.00	128.31	100.00
Grand Total	282,634,068	273,564,175	11,082,800	11,029,504	5,024,536	5,227,565	8,631,153	7,863,997
Index (1947=100)	103.32	100.00	100.48	100.00	96.12	100.00	109.77	100.00
Operator	Revenue passenger load factor (percent)		Express		Freight		U. S. Mail	
	January–October		January–October		January–October		January–October	
	1948	1947	1948	1947	1948	1947	1948	1947
Trunk Lines								
American Airlines	60.19	71.28	4,526,730	4,022,105	16,916,957	8,330,663	6,168,435	5,782,691
Braniff Airways	55.06	62.72	709,666	662,381	1,008,959	331,236	745,682	615,243
Capital Airlines (PCA)	49.38	54.15	1,562,711	1,676,625	3,967,648	1,790,187	681,349	487,269
Chicago & Southern Air Lines	57.26	59.56	501,959	545,729	443,923	298,483	372,142	315,796
Colonial Airlines	62.88	61.75	43,189	51,234	31,119	4,134	63,218	61,033
Continental Air Lines	51.57	57.33	82,034	69,394	217,131	102,638	140,961	128,943
Delta Air Lines	52.47	62.56	700,667	595,635	1,372,118	620,213	715,255	593,424
Eastern Air Lines	60.09	61.60	3,048,228	2,976,822	3,920,112	1,805,648	3,433,007	2,798,156
Inland Air Lines	60.10	66.49	44,993	35,064	64,689	23,068	82,236	78,107
Mid-Continent Airlines	58.77	62.37	159,459	121,469	227,592	79,674	234,211	190,476
National Airlines	37.28	55.85	464,479	365,981	552,236	399,237	231,101	448,237
Northeast Airlines	48.23	51.17	81,107	90,926	152,349	44,073	56,579	50,451
Pioneer Air Lines	58.46	71.20	1,425,272	1,358,972	1,849,340	708,231	1,708,827	1,691,797
Transcontinental & Western Air	59.19	67.16	4,794,222	4,371,696	7,805,994	3,738,597	6,964,244	5,777,616
United Air Lines	66.56	76.86	5,839,359	5,419,383	15,854,553	7,724,123	7,087,380	7,031,965
Western Air Lines	56.06	63.65	250,316	343,620	528,419	356,486	367,541	562,046
Trunk Total	59.12	66.99	24,234,391	22,707,036	51,913,139	26,356,711	29,052,168	26,613,214
Index (1947=100)	88.25	100.00	106.73	100.00	208.35	100.00	109.16	100.00
Feeder Lines								
All American Aviation	—	—	28,418	28,368	0	0	32,724	32,771
Challenger Airlines	19.86	22.43	16,996	5,102	31,191	2,455	25,639	10,053
Empire Air Lines	25.47	28.94	6,956	3,219	0	0	17,461	13,214
Florida Airways	25.75	17.37	3,200	1,579	0	0	6,206	3,289
Los Angeles Airways	—	—	0	0	0	0	21,345	6,646
Monarch Air Lines	23.38	20.07	12,761	14,815	71,563	28,952	21,274	11,278
Piedmont Aviation	27.76	—	13,320	—	10,869	—	13,784	—
Pioneer Air Lines	30.89	32.83	16,434	14,423	29,484	2,640	52,743	30,380
Robinson Airlines	35.53	—	0	—	1,244	—	1,394	—
Southwest Airways	34.85	43.05	25,344	26,025	59,733	5,956	35,344	25,813
Trans-Texas Airways	12.81	62.60	7,260	7	4,892	—	24,003	266
West Coast Airlines	37.45	31.90	8,441	3,707	0	0	9,505	5,010
Wisconsin-Central Airlines	29.30	—	11,353	—	0	—	8,897	—
Feeder Total	27.46	31.70	150,483	97,275	211,976	40,003	270,519	132,766
Index (1947=100)	86.62	100.00	154.70	100.00	529.90	100.00	203.76	100.00
Territorial Lines								
Caribbean-Atlantic Airlines	44.37	43.39	0	0	7,177	6,631	4,633	3,866
Hawaiian Airlines	68.02	76.73	109,384	90,921	467,872	512,559	32,849	26,550
Territorial Total	65.04	71.81	109,384	90,921	475,049	519,190	37,482	30,416
Index	90.57	100.00	120.31	100.00	91.50	100.00	123.24	100.00
Grand Total	58.21	66.48	24,494,258	22,895,232	55,600,164	26,915,904	29,360,169	26,776,424
Index (1947=100)	87.56	100.00	106.98	100.00	206.57	100.00	109.65	100.00

Scheduled Air Carrier Operations

(Continued on page 10)

International and Overseas: January–September 1948, 1947

Operator	Revenue miles		Revenue passengers		Revenue passenger-miles (000)		Passenger seat-miles (000)		Revenue passenger load factor (percent)	
	January–September		January–September		January–September		January–September		January–September	
	1948	1947	1948	1947	1948	1947	1948	1947	1948	1947
American Airlines	1,751,727	1,985,271	50,901	57,182	37,000	45,328	66,798	77,277	55.39	58.66
American Overseas Airlines	5,725,604	6,130,551	56,015	50,300	131,092	141,514	216,180	202,585	60.64	69.85
Braniff Airways	337,881	—	2,226	—	3,842	—	16,607	—	23.13	—
Chicago & Southern Air Lines	488,631	350,641	10,460	7,214	8,078	4,951	22,997	14,906	35.13	33.21
Colonial Airlines	512,820	110,738	13,737	1,438	10,802	1,121	22,347	4,499	48.34	24.92
Eastern Air Lines	563,836	542,778	12,961	12,647	13,473	12,659	31,418	27,099	42.88	46.71
National Airlines	295,491	313,532	19,803	26,002	6,067	7,654	14,531	14,335	41.75	53.39
Northwest Airlines	3,131,592	1,766,532	20,737	13,893	41,409	24,644	75,204	57,652	55.06	42.75
Pan American Airways										
Atlantic Division	9,841,571	8,525,344	89,621	94,697	215,723	223,734	329,842	309,804	65.40	72.22
Latin American Division	21,456,677	23,088,540	524,167	571,189	416,008	463,613	792,828	824,785	52.47	56.21
Alaska Operations	1,905,547	1,849,491	27,609	30,292	27,018	30,243	63,075	55,537	42.83	54.46
Pacific Operations	11,558,421	7,395,856	66,006	46,722	199,224	140,633	288,232	205,460	69.12	68.45
Pan American-Grace Airways	4,238,317	4,530,397	69,939	83,919	77,487	78,835	132,435	137,443	58.51	57.36
Transcontinental & Western Air	9,276,895	6,462,381	59,426	51,067	184,759	167,371	324,541	211,401	56.93	79.17
United Air Lines	1,408,800	777,600	16,474	12,362	39,815	29,669	55,568	32,345	71.65	91.73
Uruba, Medellin & Central Airways	112,264	178,538	1,694	3,688	563	1,149	1,810	3,189	31.10	36.03
Total	72,606,074	64,008,190	1,041,776	1,062,612	1,412,360	1,373,118	2,454,413	2,178,317	57.54	63.04
Index (1947=100)	113.43	100.00	98.04	100.00	102.86	100.00	112.67	100.00	91.28	100.00

Ton-miles flown

Operator	Express		Freight		U. S. Mail		International parcel post	
	January–September		January–September		January–September		January–September	
	1948	1947	1948	1947	1948	1947	1948	1947
American Airlines	0	0	1,091,254	917,069	63,202	74,058	0	—
American Overseas Airlines	1,880,526	1,489,144	0	0	966,472	1,211,862	93,471	—
Braniff Airways	0	—	18,947	—	3,740	—	0	—
Chicago & Southern Air Lines	0	0	85,312	43,925	2,095	1,131	25	—
Colonial Airlines	0	266	47,717	0	6,205	1,335	354	—
Eastern Air Lines	0	0	305,835	83,435	30,796	17,473	29	—
National Airlines	150,334	35,568	0	0	8,750	4,933	0	—
Northwest Airlines	42,367	53,753	953,830	192,305	978,209	336,465	0	—
Pan American Airways								
Atlantic Division	3,797,495	2,394,354	0	0	1,825,533	1,052,737	97,558	—
Latin American Division	13,044,618	11,047,501	0	0	1,943,383	1,835,814	0	—
Alaska Operations	2,199,491	266,069	0	0	292,081	234,893	0	—
Pacific Operations	4,023,849	2,147,275	0	0	2,703,819	1,910,963	0	—
Pan American-Grace Airways	2,821,714	1,536,017	53,766	12,123	154,378	169,026	0	—
Transcontinental & Western Air	2,833,185	2,114,936	0	0	1,731,281	1,801,874	172,083	—
United Air Lines	101,224	47,553	0	0	273,255	124,336	0	—
Uruba, Medellin & Central Airways	32,383	43,273	0	0	0	0	0	—
Total	28,059,354	20,878,262	2,556,661	1,248,857	10,983,199	8,776,900	363,520	—
Index (1947=100)	134.40	100.00	204.72	100.00	125.14	100.00	—	—

Domestic: October 1948

Operator	Revenue miles	Revenue passengers (unduplicated)	Revenue passenger-miles (000)	Passenger seat-miles (000)	Revenue passenger load factor (percent)	Ton-miles Flown		
						Express	Freight	U. S. Mail
Trunk Lines								
American Airlines	4,971,667	286,981	133,380	200,117	66.65	524,473	2,371,293	772,485
Braniff Airways	969,248	53,284	17,266	32,121	53.75	71,460	143,855	80,950
Capital Airlines (PCA)	1,540,728	93,016	25,048	48,613	51.53	164,868	534,211	81,146
Chicago & Southern Air Lines	661,630	26,496	9,678	17,555	55.13	49,254	48,892	47,317
Colonial Airlines	312,972	13,579	3,768	6,537	57.64	4,557	5,672	7,064
Continental Air Lines	480,209	14,204	4,963	9,892	50.17	8,677	24,835	16,206
Delta Air Lines	1,078,346	44,327	15,368	28,338	54.23	76,915	150,191	73,728
Eastern Air Lines	4,023,849	176,458	73,856	123,941	59.59	360,635	542,882	403,568
Inland Air Lines	192,918	6,416	2,328	3,847	60.51	5,515	8,367	9,002
Mid-Continent Airlines	727,625	29,043	8,527	14,784	57.68	18,604	26,283	27,945
National Airlines	566,450	16,184	8,442	23,544	35.86	48,354	38,623	28,447
Northeast Airlines	283,702	22,932	4,351	8,483	51.29	7,961	14,425	6,731
Northwest Airlines	1,415,721	51,240	26,246	46,592	56.33	153,779	339,622	178,010
Transcontinental & Western Air	4,938,513	115,637	70,473	138,329	50.95	586,360	1,055,291	683,878
United Air Lines	5,030,981	186,910	109,751	170,023	64.55	684,804	1,877,095	867,615
Western Air Lines	523,310	22,571	8,562	16,908	50.64	28,393	52,135	37,260
Trunk Total	27,717,869	1,159,278	522,007	889,624	58.68	2,794,609	7,233,672	3,321,352
Feeder Lines								
All American Aviation	145,872	0	0	0	—	3,372	0	3,780
Challenger Airlines	117,172	1,779	445	2,343	18.99	2,642	3,840	3,046
Empire Air Lines	90,219	2,199	488	1,895	25.75	649	0	1,942
Florida Airways	68,246	1,100	147	551	26.68	250	0	602
Los Angeles Airways	26,691	0	0	0	—	0	0	2,977
Monarch Air Lines	151,733	2,296	564	2,687	20.99	1,314	11,095	2,447
Piedmont Aviation	191,065	5,013	1,124	4,038	27.84	2,182	3,017	2,266
Pioneer Air Lines	343,158	10,131	2,697	8,191	32.93	2,109	4,772	8,289
Robinson Airlines	44,142	2,329	343	927	37.00	0	1,048	999
Southwest Airways	206,763	9,207	1,677	4,962	33.80	3,007	7,237	4,136
Trans-Texas Airways	194,184	2,934	716	4,078	17.56	799	1,088	4,907
West Coast Airlines	107,883	5,016	635	2,065	30.75	733	0	664
Wisconsin-Central Airlines	99,033	1,467	241	870	27.70	2,305	0	1,482
Feeder Total	1,786,161	43,471	9,077	32,607	27.84	19,362	32,097	37,537
Territorial Lines								
Caribbean-Atlantic Airlines	35,941	5,475	355	904	39.27	0	1,412	584
Hawaiian Airlines	233,988	24,828	3,319	5,100	65.08	10,885	45,954	4,300
Territorial Total	269,929	30,303	3,674	6,004	61.19	10,885	47,366	4,884
Grand Total	29,773,959	1,233,052	534,758	928,235	57.61	2,824,856	7,313,135	3,363,773

Size of Crews Needed Is Subject of Study

A study of the factors involved in determining the size of crews for large transport aircraft is being made by the Flight Safety Foundation, New York, for the Civil Aeronautics Administration and the Civil Aeronautics Board.

Faced with the problem of determining the size of crews for transport aircraft, the two agencies have asked the Foundation to undertake the study of three fundamental factors:

1. Define the problems involved in the crew-complement study outlining the important major areas of investigation;
2. Outline existing and proposed scientific methods to be used for determining crew-complement requirements and defining those lines along which cockpit research might be developed; and
3. Outline a cooperative research program using the methods set down in (2), leading toward establishment of more precise criteria for evaluation of the necessary crew complement in large transport aircraft.

The preliminary study will be followed by detailed analyses of all aspects of the problems. The two aviation agencies then will consider the results of this study prior to promulgating regulations governing the crew requirements of transport aircraft.

McClurkin Heads CAB Bureau

The Civil Aeronautics Board announced last month that it had appointed Robert J. G. McClurkin as Director of the Bureau of Economic Regulation, replacing Russell B. Adams who became a Member of the Board on May 13, 1948.

Scheduled Air Carrier Operations

(Continued from page 9)

International and Overseas: September 1948

Operator	Revenue miles	Revenue passengers (unduplicated)	Revenue passenger-miles (000)	Passenger seat-miles (000)	Revenue passenger load factor (per cent)	Ton-Miles Flown			
						Express	Freight	U. S. Mail	International parcel post
American Airlines	189,790	6,719	4,718	8,549	55.54	0	103,656	6,980	0
American Overseas Airlines	793,239	9,687	18,562	29,150	63.68	401,171	0	87,995	16,433
Brainiff Airways	88,322	786	1,358	4,416	30.75	0	6,106	942	0
Chicago & Southern Air Lines	97,282	1,676	1,718	4,861	35.32	0	19,101	707	25
Colonial Airlines	56,800	1,422	1,114	2,176	44.99	0	5,019	1,065	63
Eastern Air Lines	58,240	1,891	1,967	3,242	60.67	0	42,606	3,411	29
National Airlines	32,838	2,755	861	1,864	46.19	16,311	0	779	0
Northwest Airlines	338,010	2,765	6,064	8,590	70.59	7,892	137,263	118,556	0
Pan American Airways:									
Atlantic Division	1,238,945	11,907	30,068	43,701	68.80	471,102	0	190,227	15,124
Latin American Division	2,339,689	55,250	47,182	84,441	55.88	1,605,106	0	197,737	0
Alaska Operations	231,005	5,024	4,550	9,972	45.63	110,174	0	35,644	0
Pacific Operations	1,415,016	8,742	25,557	35,426	72.14	401,475	0	321,076	0
Pan American Grace Airways	467,962	7,498	8,685	14,955	58.07	109,555	34,736	18,216	0
Transcontinental & Western Air	1,278,586	9,347	28,427	45,596	62.35	406,128	0	174,380	28,463
United Air Lines	211,200	3,316	7,989	9,254	86.23	14,923	0	28,504	0
Uruba, Medellin & Central Airways	10,621	200	66	179	36.87	2,795	0	0	0
Total	8,847,548	128,925	188,907	306,675	61.60	3,849,635	348,787	1,186,219	60,137

Domestic passenger-miles flown (total revenue and nonrevenue, in thousands)

	January	February	March	April	May	June	July	August	September	October	Total
Trunk lines	406,599	364,344	447,405	492,435	550,223	600,378	572,260	582,588	559,346	546,999	5,122,577
Feeder lines	3,006	3,535	5,373	6,360	8,109	9,408	10,351	11,408	10,588	9,939	79,080
Territorial lines	4,097	3,859	4,225	3,690	4,259	5,143	5,579	6,552	4,293	3,701	45,398
Total	414,702	371,738	457,003	502,485	562,591	614,929	588,193	600,548	574,227	560,639	5,247,055

Official Actions . . . Civil Aeronautics Board

(Continued from page 7)

SD-1237 revokes student pilot certificate of George D. Taylor, Oakland, Calif., for carrying a passenger (Oct. 13).

SD-1238 suspends for 60 days commercial pilot certificate of Athol Arvil Kelley, Tucson, Ariz., for piloting a plane at an altitude of approximately 20 feet, or less, above the ground, as a result of which the aircraft collided with a cactus plant, causing substantial damage to the aircraft (Oct. 5).

SD-1239 revokes private pilot certificate of Dan E. Sellick, Adair, Okla., for low flying over Pryor, Okla. (Oct. 19).

SD-1240 revokes private pilot certificate of M. R. Lester, Zwolle, La., for piloting an aircraft which had not been inspected within the preceding 12 months, and for landing at night at Shreveport Municipal Airport without lights (Oct. 18).

SD-1241 terminates proceedings against Rex L. Murphy, Bakersfield, Calif. (Oct. 5).

SD-1242 revokes private pilot certificate of William Gardner, Santa Rosa, Calif., for low flying and performing a dive over Santa Rosa (Sept. 15).

SD-1243 revokes student pilot certificate of James Dow Johnson, Plainview, Tex., for carrying a passenger and for making dives at low altitude over Silverton, Tex. (Sept. 28).

SD-1244 suspends for 3 months, private pilot certificate of Carol Mitchell Linton, Chicago, Ill., for low flying over San Diego, Calif., and for performing aerobatic maneuvers when neither he nor his passenger had parachutes (Aug. 4).

SD-1245 suspends for 30 days, private pilot certificate of Charles Eugene Groshong, Missoula, Mont., for buzzing an ice plant near Klickitat, Oreg. (Aug. 20).

SD-1246 revokes student pilot certificate of Henry Ray Andrews, Centralia, Wash., for carrying a passenger. In approaching for a landing on an unimproved field, the aircraft crashed, injuring both the pilot and passenger (Aug. 14).

SD-1247 suspends for 60 days private pilot certificate of Don Garris, Grants Pass, Oreg., for low flying above a school building at Kerby, Oreg. (Aug. 20).

SD-1248 suspends for 6 months, student pilot certificate of Duane Huston Henson, Seattle, Wash., for low flying over Seattle and for making passes at a moving automobile at low altitude (Aug. 26).

SD-1249 suspends for 30 days, private pilot certificate of David Ray Armstrong, Cascade, Mont., for careless operation of an aircraft on the ice of a lake near Choteau, Mont. (Aug. 18).

SD-1250 suspends for 6 months, commercial pilot certificate and revokes flight instructor rating of Eldon H. Lowinske, Sleepy Eye, Minn., for demonstrating spins to students when no parachutes were worn and for authorizing solo flights for students without first determining the competency of the students to make such flights with safety (Oct. 4).

SD-1251 revokes repair station certificates of Springfield Airport, Inc., for not maintaining personnel, facilities, equipment, and material in conformity with the standards required (Oct. 19).

SD-1252 suspends for 30 days, private pilot certificate of Stanley W. Bailey, Astoria, Oreg., for low flying (Sept. 10).

SD-1253 revokes private pilot certificate of Norman Carl Oslund, Portland, Oreg., for low flying (Sept. 15).

SD-1254 suspends for 6 months, student pilot certificate of Roy B. Benefiel, Waterloo, Iowa, for low flying and doing aerobatic maneuvers over a residential section (Oct. 19).

SD-1255 revokes student pilot certificate of Donald Edward Hansen, Fort Worth, Texas, for carrying a passenger (Aug. 27).

SD-1256 suspends for 60 days, student pilot certificate of Tommy Allen Daily, Fort Worth, Texas, for low flying and doing aerobatics over a residential section (Oct. 12).

SD-1257 revokes private pilot certificate of Orval Truman Quillen, Kennewick, Wash., for low flying over an open air assembly of persons (Sept. 11).

SD-1258 suspends for 4 months, private pilot certificate of John Courtland Heinrich, Missoula, Mont., for low flying over Valier, Mont. (Sept. 14).

SD-1259 revokes private pilot certificate of Axtent T. Babineco, San Diego, Calif., for low flying (Oct. 6).

SD-1260 suspends for 3 months, pilot certificate of Homer Dean Smith, Bakersfield, Calif. (Oct. 5).

SD-1261 suspends for 12 months, pilot certificate of Luther Reed, Cameron, N. Mex., for violating Section 43.50CAR (Aug. 31).

SD-1262 suspends for 6 months, private pilot certificate of Dr. John K. Walker, Pine Bluff, Ark., for piloting a glider which had not been inspected and approved (Sept. 3).

SD-1263 revokes student pilot certificate of Pearl Allen Stafford, Tulare, Calif., for flying outside the area designated by his instructor and for performing maneuvers at low altitude (Oct. 6).

SD-1264 revokes private pilot certificate of Marvin Hayward Ford, Red Bluff, Calif., for low flying over a bridge and several boats (Oct. 13).

SD-1265 revokes student pilot certificate of Milton Conway Littlejohn, McFarland, Calif., for low flying over a dwelling (Oct. 13).

SD-1266 revokes student pilot certificate of Clyde E. Sanders, Trona, Calif., for carrying a passenger (Oct. 13).

SD-1267 suspends for 6 months, private pilot certificate of Albion Melvin McDowell, Reedley, Calif., for performing aerobatics with a passenger when neither he nor passenger had parachutes (Oct. 14).

SD-1268 terminates proceedings against Kurt Eilers, Bakersfield, Calif., who was grounded December 1, 1947, for carrying a passenger (Oct. 5).

SD-1269 suspends for 6 months, student pilot certificate of Bert Henry Edsinger, Ogden, Utah, for a violation of Section 43.50 CAR (Oct. 5).



Board Proposes Changes in Rules for Irregulars

The Civil Aeronautics Board has circulated for public comment a proposed revision of Economic Regulation 292.1, governing small and large irregular carriers.

The proposed revision would terminate the general exemption of large irregular air carriers 30 days from the date the revision is made effective, and provides that thereafter each large irregular carrier will be permitted to operate only by an individual exemption. However, in the case of large irregular carriers which apply for individual exemption within 30 days after the effective date of the revision, the exemption from 401(a) of the Act presently provided by § 292.1 would be left unchanged by the revision; and the operating authority derived from that exemption would remain effective until the Board has passed upon their applications for individual exemptions.

The Board said that the effect of the revision would be to subject exemptions currently enjoyed by large irregular carriers to review for determination whether such exemptions should be terminated, or permitted to continue in the form of individual temporary exemptions.

The revision would also generally tighten the restrictions on both large and small carriers to prevent more effectively, operations beyond the scope of their exemptions and would further clarify the fact that a letter of registration, under which these carriers operate, is not a license and confers no privileges beyond those set forth in the regulation itself.

Steps are contemplated by the Board in this revision to prevent the widespread practice of piecing together the individual irregular operations of two or more carriers to make an over-all pattern of regularity. The chief mechanism for engaging in such practices, the use of a single ticket agency for two or more carriers, would be brought under the scrutiny of the Board. This provision would require an affirmative showing that its use would not adversely affect the public interest or the carrier's intention and ability to conform to provisions of the Act, as a condition of its adoption or continued use.

Downdraft Probable Cause.—An excessive loss of altitude resulting from a downdraft in an area of severe turbulence was given as the probable cause of the accident near Ward, Colo., January 21, 1948, in which a Civil Aeronautics Administration plane was destroyed and the three occupants killed.

The aircraft was enroute from Denver to Grand Junction, Colo., to check the VHF airways facilities. The crew consisted of three employees of the CAA: Fred L. Snively, pilot, Warran L. Lungstrum, co-pilot, and Ross C. Brown, observer.

Twenty minutes after take-off, the flight reported they were at an altitude of 14,500 feet, 20 miles west of Denver, flying in an area of severe turbulence, but made no mention of any mechanical difficulties. The last communication, which faded out without being completed, was in response to a message from the Cheyenne radio.

Shortly thereafter an extensive search was started but snow, which continued for 7 days, set in and the wreckage was not discovered until May 23, when it was sighted from another plane on the side of Navajo Peak, approximately 500 feet below the summit.

There was little from which to deduce the probable cause of the accident, the CAB said, but all evidence seemed to eliminate the possibility that any mechanical difficulty had been experienced, and the severe turbulence was held to be the "only known possible cause."

"When wind conditions are similar to those which existed at the time of this accident," the CAB said, "severe turbulence is created as the air spills over the Continental Divide to the plains immediately east of the mountains. Vertical currents of air have been encountered of such magnitude that they have carried aircraft several thousand feet up or down."

The conclusion was reached that the plane crashed immediately after its last radio transmission.

"The fading or the blocking out of this transmission can be accounted for by the aircraft being carried below surrounding mountain peaks by a severe downdraft," the accident report stated. "This downdraft could have been of such intensity that the aircraft was carried below surrounding terrain before a corrective course could be flown. It may have been that the airplane was carried into cloud formations and the mountain was struck simply because it was obscured from view."

Stall Leads to Fatal Accident.—An inadvertent stall at an altitude too low for recovery apparently was the cause of an accident at Marysville, Kans., the evening of September 5, 1948, in which Rev. Walter B. Zimmerman, his wife and daughter, and Miss Kay Johnson, a friend of the family, lost their lives, the Civil Aeronautics Board found. Contributing factors were the pilot's inexperience, and his failure to readjust the trim tab after a discontinued landing attempt, the Board said.

Mr. Zimmerman was a certificated pilot with a private rating and had flown approximately 45 hours, but without any night flying experience. En route from Swanton, Nebr., to Manhattan, Kans., the pilot attempted to land at Marysville Airport. The plane bounced several times after touching the runway. Power was applied and the airport was circled for another landing approach.

While on the base leg of the traffic pattern, the aircraft stalled at about 100 feet and dived to the ground. Fire followed immediately. Investigation of the wreckage disclosed no evidence of mechanical failure but the elevator trim tab was set for a nose-high position. Apparently the pilot had set it for landing and failed to adjust it when he discontinued his initial landing attempt. The weather was clear and there was little or no wind.

Cause of Fire Undetermined.—The probable cause of an accident in which an aircraft of Eagle Air Freight, a non-scheduled carrier, was destroyed near Eloy, Ariz., June 12, 1948, was fire in flight which resulted in the loss of the left engine, necessitating a crash landing, the CAB found.

Failure of the pilot to remain fully awake at all times, and failure to follow correct emergency procedures were given as contributing factors.

The plane was en route from Burbank, Calif., to Fort Worth, Tex. Shortly after take-off, control of the aircraft was given to the co-pilot and the pilot went to sleep. Some two hours later the co-pilot observed flames coming from the vicinity of the left engine. The pilot was awakened by a shout and immediately assumed control.

In an attempt to control the fire, the crew discharged the emergency fire bottle, cut the fuel flow to the engine, and feathered the propeller. However, the fire continued to burn intensely and the propeller did not feather. A descent for an emergency landing was started.

To correct excessive air speed, the crew reduced power to the right engine and raised the nose of the aircraft. The cockpit then filled with smoke to the extent that the instruments were not visible. The aircraft vibrated violently, then fell into an uncontrolled spin or spiral. At approximately 4,000 feet, smoke cleared from the cockpit and control of the aircraft was regained. A crash landing was made in a wheat stubble field and the crew escaped through the cockpit hatch.

"There are not sufficient facts known at this time from which to deduce any probable cause of the fire," the accident report stated. Despite an extensive search, the missing engine has never been found.

The Board criticized cockpit procedure during the flight. "Fifteen minutes after take-off, the captain was asleep," the report said. "Had he been awake at all times, he might have been aware of engine mal-operation and corrected it before fire occurred. Furthermore, had the crew followed normal procedure, they might have controlled the fire in the air. Normally, the propeller is feathered, and the shut-off valves are closed prior to the discharging of CO₂ in an engine nacelle."

Extreme Turbulence Blamed.—The Board determined that the probable cause of an accident in which a Slick Airways air freight carrier crashed near Columbus, Ohio, May 16, 1948, was the in-flight failure of the fuselage carry-in structure beneath the fin, due to extreme turbulence.

The aircraft, en route from Newark, N. J., to San Francisco was flown through severe turbulence approximately half an hour before the accident and the rivets and fuselage skin immediately beneath the vertical fin failed during flight, the Board found. Separation of the fuselage skin allowed the vertical fin to rock across its longitudinal axis until the fuselage carry-in structure beneath the fin failed completely.

Upon being cleared by the Columbus tower for landing, the flight replied: "We are declaring an emergency. Our rudder is locked and I don't think we will have any directional control on the ground."

Although the first touchdown appeared normal, power was immediately applied and the aircraft took off. A second touchdown was made on the runway without apparent difficulty but power was again applied and the flight took off again. When the flight reached a point 2½ miles east of the field in its left circle of the field, it was observed to spin to the ground.

The aircraft was destroyed and the crew of two fatally injured.

Flight Planning Improper.—Improper flight planning under conditions of an excess gross weight, resulting in a landing at sea, was given by the CAB as the probable cause of the loss of an aircraft operated by American International Airways, a non-scheduled carrier, in the North Atlantic on October 14, 1947.

All 62 passengers and the crew of 7 were rescued by the United States Coast Guard weather ship *Bibb*.

En route from Poole, England, to the United States, the flight encountered headwinds of greater velocity than had been used in computation of the flight plan, and approximately 550 miles from Gander, Newfoundland, the Captain and First Officer concluded that fuel was insufficient to complete the ocean crossing and it was decided to turn back to the *Bibb*, where rescue facilities would be available immediately.

The aircraft landed safely near the *Bibb* in rough seas but later was substantially damaged when it drifted into the Coast Guard vessel. Subsequently, the aircraft was sunk by gunfire because it constituted a hazard to surface craft.

Rescue operations were slow and hazardous but by the next day all of the passengers and crew had been successfully transferred to the *Bibb*.

The CAB found three basic reasons for the forced landing at sea. The accident report gave these as: (1) Exceeding the maximum permissible gross weight; (2) no cruise control; and (3) failure to utilize available weather data with references to speed and navigational fixes.

Safe Altitude Not Maintained.—Failure of the flight to follow prescribed instrument procedure and to maintain a safe altitude during the course of an instrument approach to the Washington National Airport was the probable cause of the crash of Eastern Air Lines' Flight 572 near Oxon Hill, Md., January 13, 1948, in which five of the nine occupants aboard, including the pilot and co-pilot, were killed and four injured, the CAB found.

The aircraft crashed into trees 109 feet above sea level five miles south of the airport at about 4:45 a. m. Investigation disclosed no evidence of structural failure or mechanical malfunctioning.

At the time of the accident, weather conditions were highly variable in the vicinity of Washington, ceilings ranging from 100 to 2,000 feet above the ground.

"Altitude may have been reduced for the purpose of flying by visual reference to the ground over the Potomac River to the airport," the accident report stated. "Weather conditions which were highly variable may have led the pilot to believe that once contact over the river, he could remain so for the short distance remaining to the field. No other reason for the flight's approach into Washington below the specified altitude of 1,500 feet for instrument approach appears from the facts disclosed by investigation."

Night Accident Fatal.—An attempted night flight resulted in serious injuries to Orin Alexander, a commercial pilot, and fatal injuries to his two passengers, Roy Anderson and Luther Cassell, in an accident at the airport at San Carlos, Calif., June 11, 1948.

During the evening, Pilot Alexander met two men, strangers to him, at a tavern and they had several rounds of drinks, according to a report of the accident made by the CAB's Bureau of Safety Investigation. Then the three drove to the airport, where Alexander was employed, and Alexander took a plane belonging to his employer. He started to take off towards the west but about midway down the runway, the aircraft veered to the right, became airborne, struck a stack of baled hay approximately 60 feet to the right of the runway, flipped over on its back and burst into flames.

Helicopter Service For Chicago Area Authorized by CAB

The Civil Aeronautics Board has issued a temporary certificate of public convenience and necessity to Helicopter Air Service authorizing that carrier to engage in air transportation of property and mail in the Chicago area for a period of five years. The Board said that the new helicopter operation would provide an expedited air-mail service within the city of Chicago proper and to and from its major suburban communities within a 50-mile radius of the airport.

The specific route authorized by the Board is as follows:

(a) Between the Chicago Municipal Airport and the Chicago Municipal Airport via Berwyn, Oak Park, Park Ridge, Glenview, Evanston, Wilmette-Winnetka, Glencoe, Highland Park, Lake Forest, Waukegan, Libertyville, Barrington, Palatine, Arlington Heights, and Des Plaines, Ill.;

(b) Between the Chicago Municipal Airport and the Chicago Municipal Airport via La Grange, Maywood, Elmhurst-Villa Park, Glen Ellyn-Wheaton, West Chicago, Elgin, St. Charles-Geneva, Batavia, Aurora, Naperville, Downers Grove, and Hinsdale, Ill.;

(c) Between the Chicago Municipal Airport and the Chicago Municipal Airport via Blue Island and Harvey, Ill., Whiting, East Chicago, Gary, and Hammond, Ind., Lansing, Chicago Heights, Joliet, Lockport, Lemont, and Argo, Ill.; and

(d) Between the Chicago Municipal Airport and the Chicago Post Office Building.

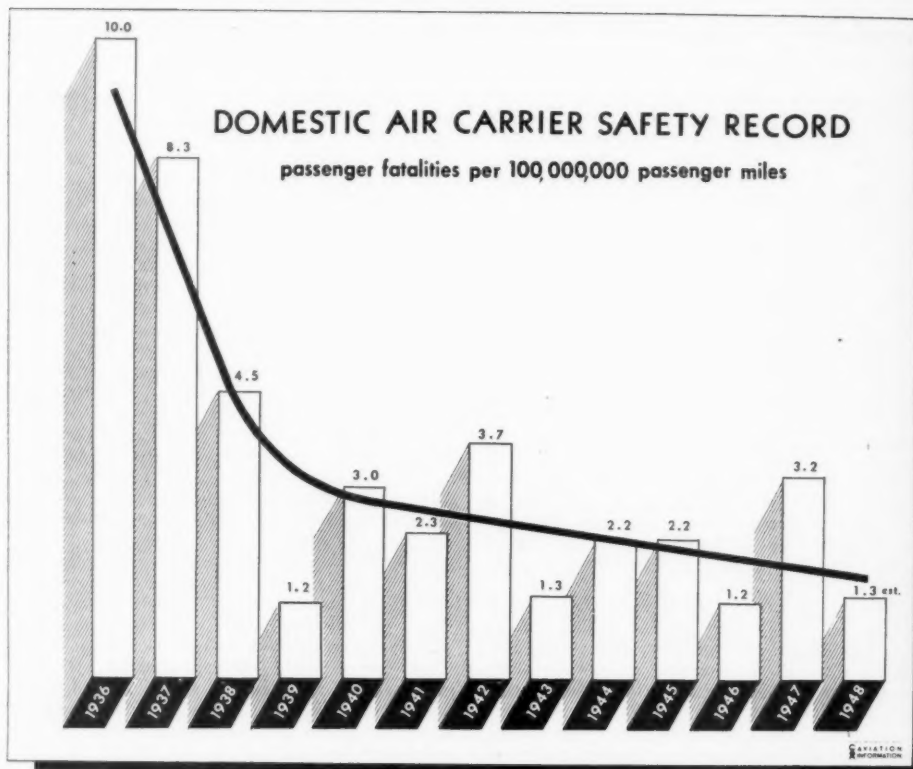
Changes Are Likely.—The Board said that since changes in mail volume and shifts in population are likely to occur, maximum flexibility in the conduct of the operation appears desirable to permit rapid and frequent modifications, as experience would indicate. By reason of the limited extent of the operation, it would be an undue burden on the carrier to request it to engage in formal proceedings to obtain authority to serve new or additional points on each occasion that such service was found to be necessary. The Board therefore granted an exemption to the carrier so that it may serve with rotary-wing aircraft any point within a radius of 50 miles of the Chicago Municipal Airport.

The Board said further development of the helicopter and the experience to be gained from the operation are desirable in the interest of national defense. The Board disclosed that both the Air Force and the Navy had urged certification of the service, emphasizing the value of the helicopter in military operations and the assistance which the operation would give by providing a valuable background of experience and building a nucleus of trained helicopter flight, maintenance and engineering personnel as part of an emergency reserve for defense.

The Board said, moreover, that the Chicago Helicopter service would expedite mail deliveries from 6 to 20 hours on week days and week-end and pre-holiday deliveries by from 40 to 42 hours.

Certificate Amendment Recommended

An Examiner for the Civil Aeronautics Board has recommended that the temporary certificate of Mid-Continent Airlines for route No. 80 be amended to remove the condition that Tyler and Longview-Kilgore-Gladewater, Tex., shall not be served on the same flight.



CAA Releases New Study Giving Data on Aircraft

A new statistical study of the 97,619 civil aircraft registered with the CAA on August 1, 1948, was announced December 29 by D. W. Rentzel, Administrator of Civil Aeronautics.

This new study replaces that for 1947, represents a thorough audit of CAA aircraft records and includes the weeding out of aircraft permanently retired from service. The study reveals that in spite of all eliminations, the number of civil aircraft in the study increased 4,975 from the 92,644 in the 1947 study.

The increase in aircraft was evenly distributed among the states, with all but five states and the District of Columbia showing an increase. Besides the District, the states showing fewer aircraft than in 1947 included Connecticut, Delaware, Georgia, Maryland, and Texas. Territorial and foreign aircraft showed an increase from 886 to 1,026 during the period.

Of the total 97,619, the records reveal that 48,930 are post-war manufactured. This is to be compared with the 40,064 post-war aircraft indicated in the 1947 study.

In addition to the features mentioned, the new study shows registered aircraft by take-off horsepower, registered aircraft by year of manufacture and for aircraft by manufacturer, specification number if certificated, designation, engine make and take-off horsepower and the number of particular type.

This study may be obtained from the CAA Office of Aviation Information, Washington 25, D. C.

Revenue Plane Miles Increase

Revenue plane miles flown in scheduled passenger operations during the first half of 1948 aggregated 195,954,872 with 5 fatal and 27 non-fatal accidents, against 187,155,041 plane miles with 6 fatal and 18 non-fatal accidents in the first half of 1947, a report by the Civil Aeronautics Board reveals.

New Statistical Handbook on Aviation Issued by CAA

The new and revised 1948 edition of the CAA Statistical Handbook of Civil Aviation containing all available civil aviation statistics through calendar year 1947 is now available. D. W. Rentzel, Administrator of Civil Aeronautics, has announced.

The new edition is the third in the Handbook series, the first having been published in 1943 and the second in 1945, the latter publication having two supplements.

Several changes have been incorporated into the 1948 edition, the major one pertaining to scheduled air carrier operations and accidents. These statistics, furnished by the Civil Aeronautics Board, now carry territorial scheduled air carrier operations in the domestic category. All previous figures have been reworked and now conform to the latest CAB classification.

Statistical changes have been made in the section covering the Federal Airways. Items of growing importance such as Instrument Landing Systems, Precision Beam and Surveillance Radar have been included in the Landing Aid to Navigation section while items of lessening importance such as interphone and teletype circuit mileage have been eliminated.

The airports section of the handbook has been enlarged and now includes a cross-reference table showing the number of airports in the country by class and type and also a table on airports by class and population. Another table shows civil airports by class and type of fixed-base operation activity.

Other sections of the handbook have been enlarged upon to provide a complete reference booklet on all types of civil aviation operations. The handbook is the official government publication on aviation statistics.

The new book may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 50 cents per copy.

